2023 PHOENIX LANDAND HOUSING FORECAST

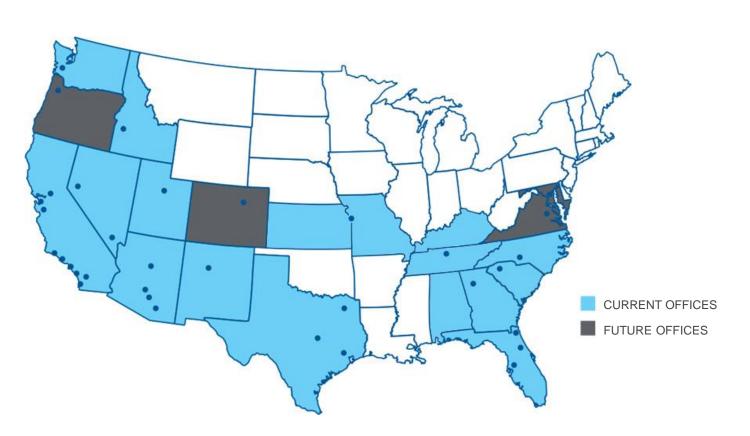




"The Best-Known Name in Land"

FOUNDED IN 1987

- Land Advisors Organization operates in 30 growth markets nationwide
- Specializing Land-Related Services Advisory, Brokerage, Capital, Infrastructure, Site Selection







US Top Population Growth MSAs 2021 to 2022

US Population 2022 333,600,000

Arizona Accounts for 2.2% of the US Population

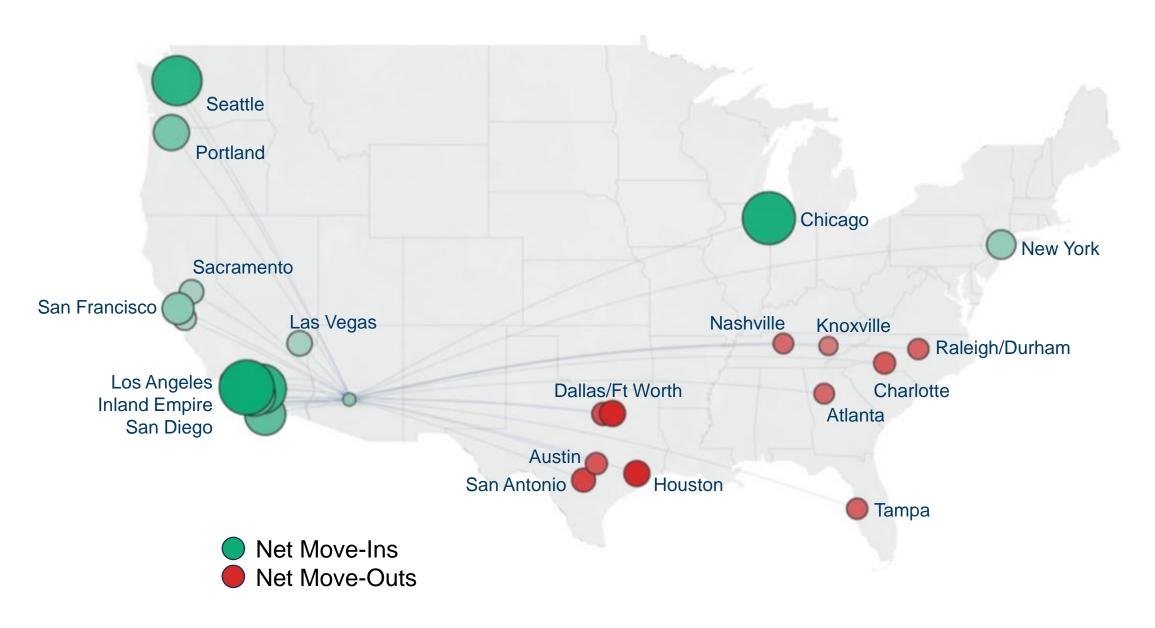
AZ Percentage of US Population Growth

2000 to 2022: **4.1%**



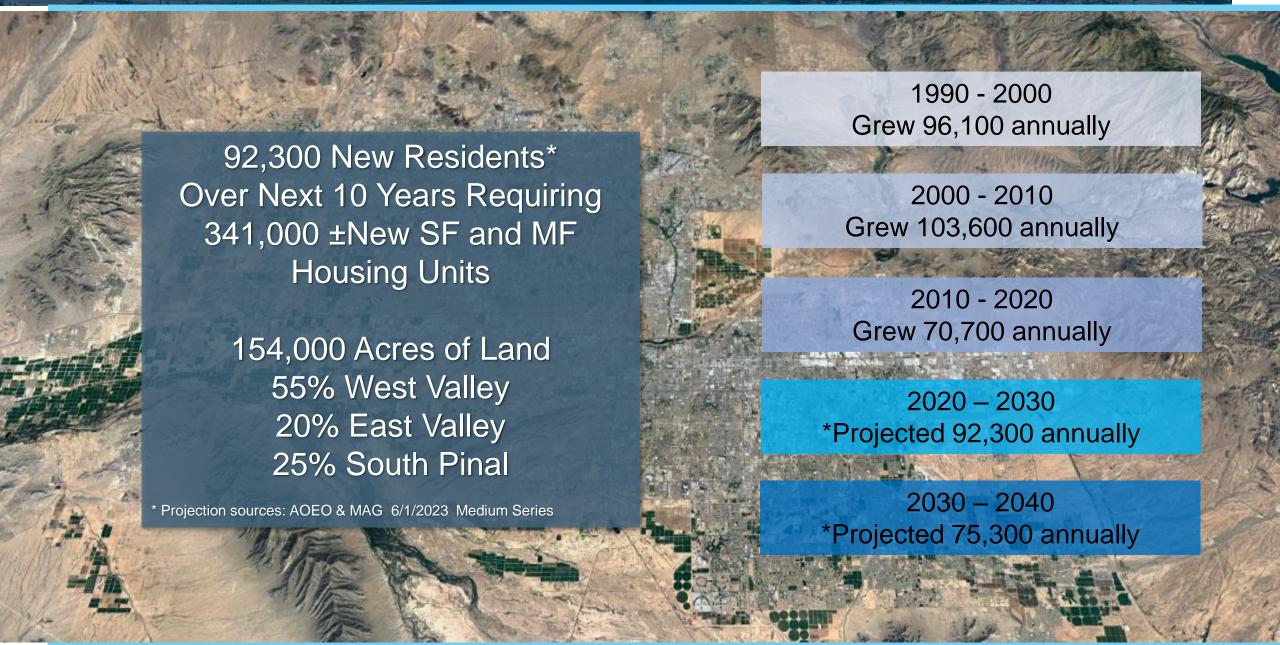
Migration 2021 to 2022 – to and from Metro Phoenix



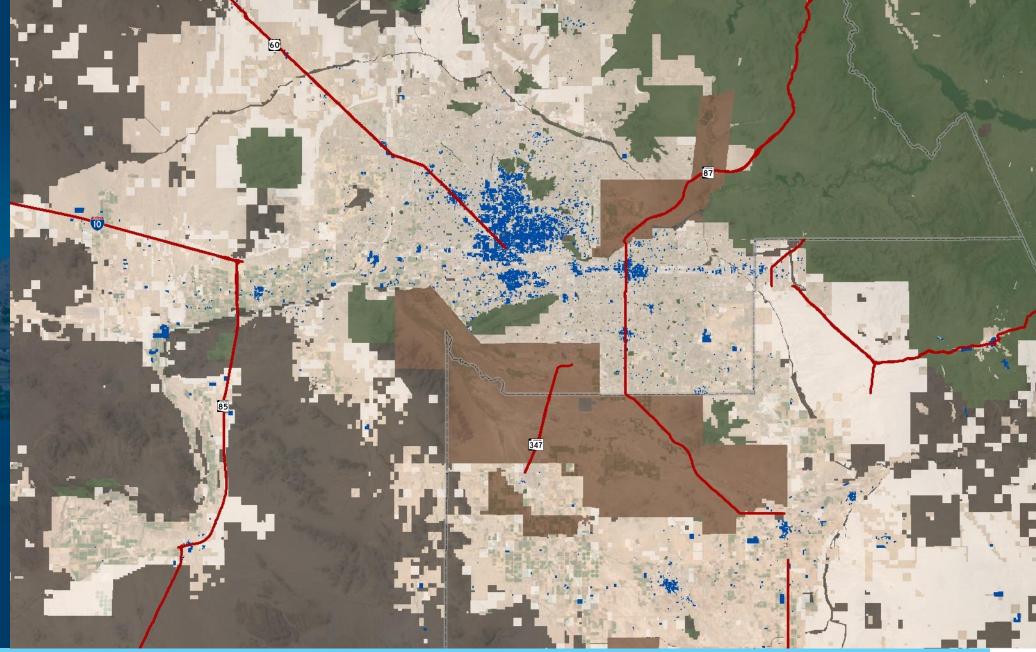


Metro Phoenix 50 Years of Growth





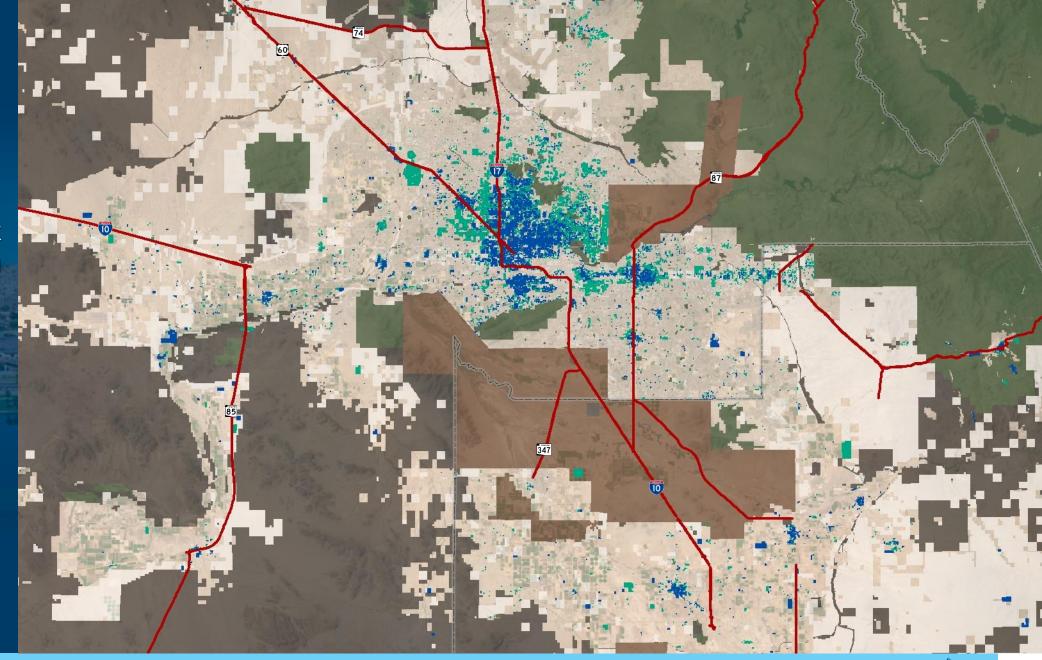
Year Built Pop Before 1955 500K



Federal
Indian Community
State Trust
Parks & Preserves

Source: First American Title

Year Built Pop
Before 1955 500K
1956 – 1970 1.04M

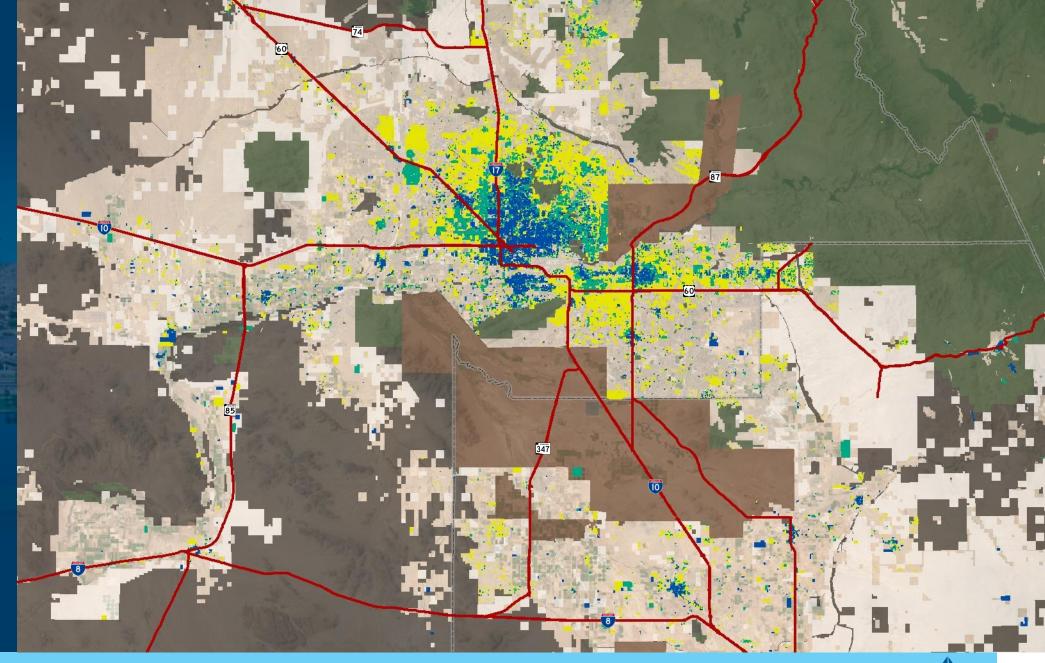


Federal
Indian Community
State Trust
Parks & Preserves

Year Built Pop
Before 1955 500K
1956 – 1970 1.04M

1971 – 1985 1.92M

Federal Indian Community State Trust Parks & Preserves



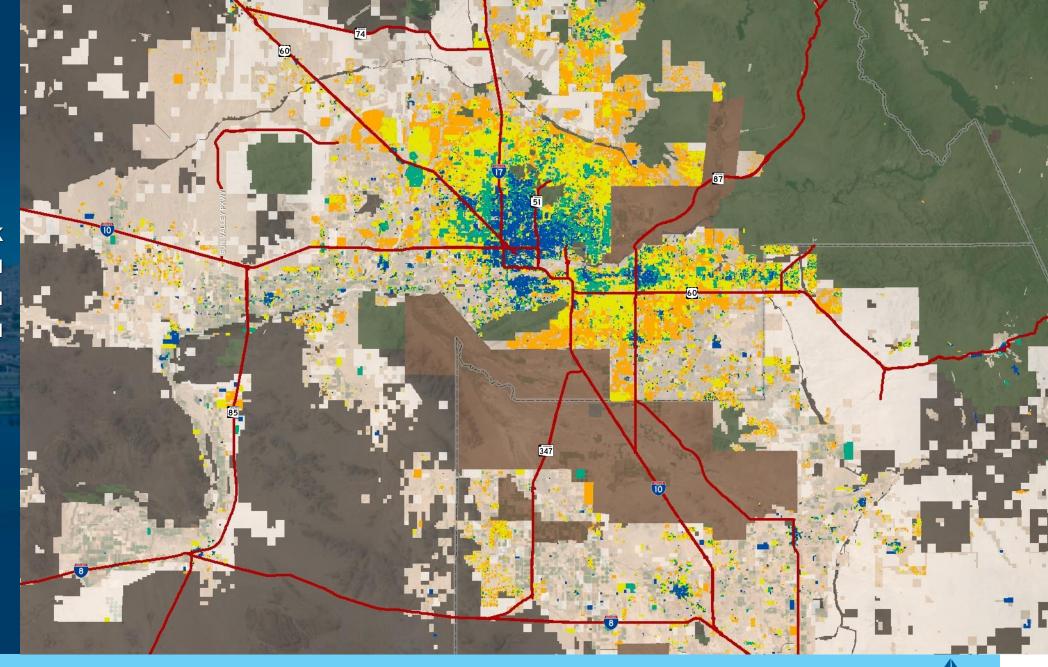
Year Built Pop Before 1955 500K

1956 – 1970 1.04M

1971 – 1985 1.92M

1986 **–** 2000 3.25M

Federal Indian Community State Trust Parks & Preserves

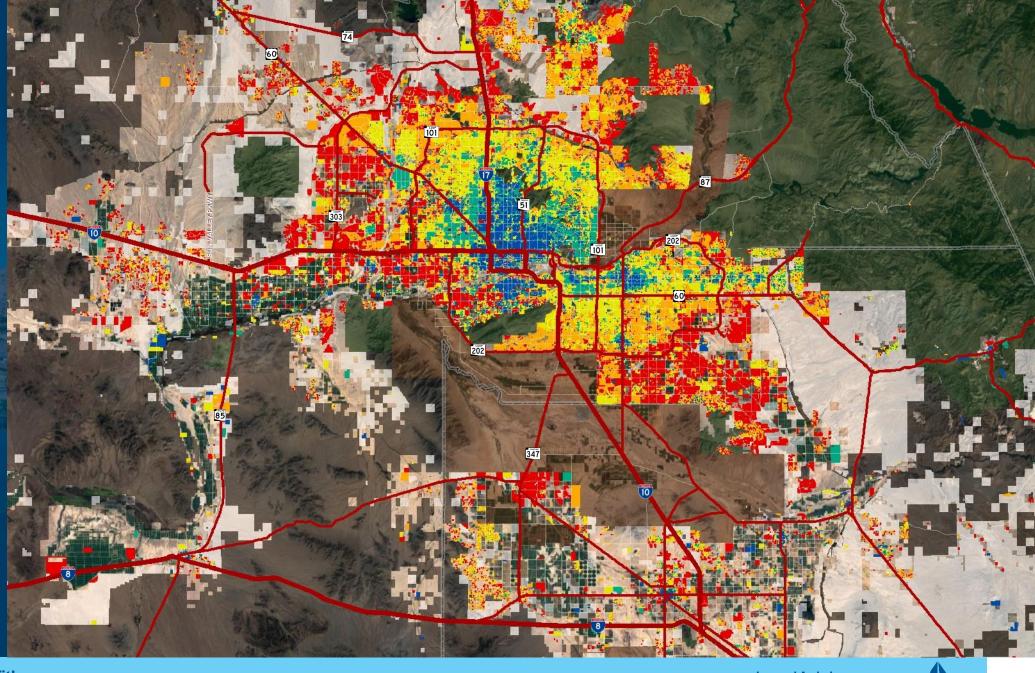


Source: First American Title

Year Built Pop
Before 1955 500K
1956 – 1970 1.04M
1971 – 1985 1.92M
1986 – 2000 3.25M

1986 – 2000 3.25M 2000 – 2023 5.00M

Federal Indian Community State Trust Parks & Preserves



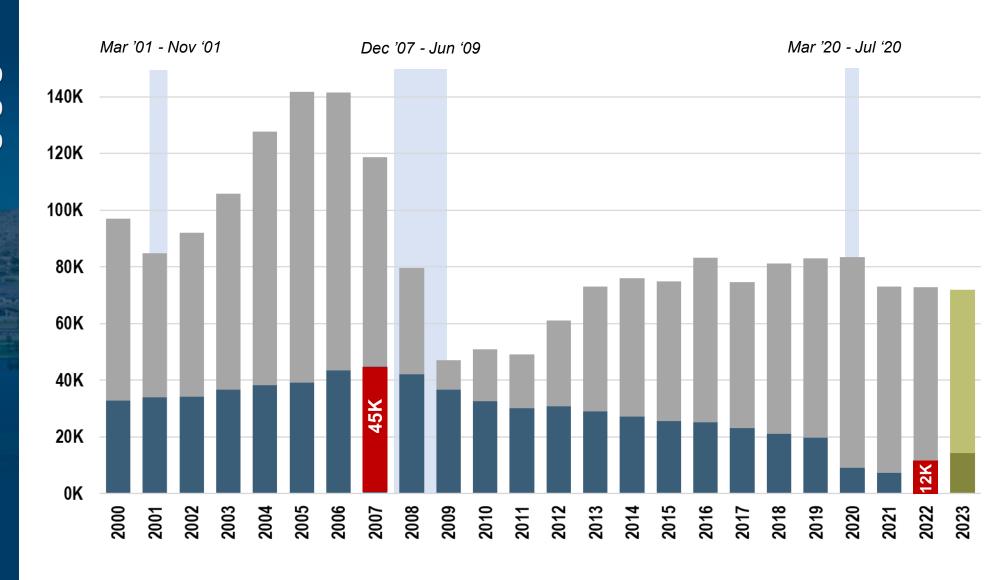
Annual Population Change – Metro Phoenix

Natural Growth

2007 Peak 44,800

2022 11,700

Change -33,100



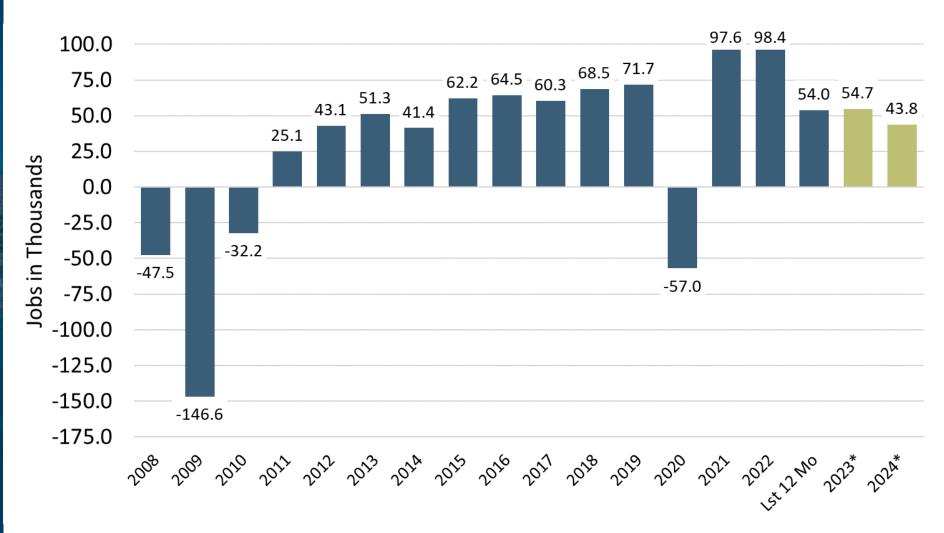


Annualized Employment Change - Metro Phoenix

Jobs Added or Lost Annually – October 2023

Unemployment Rate

		YoY
	Oct 23	Change
US	3.9%	0.2%
AZ	4.2%	0.1%
PHX	3.7%	0.3%



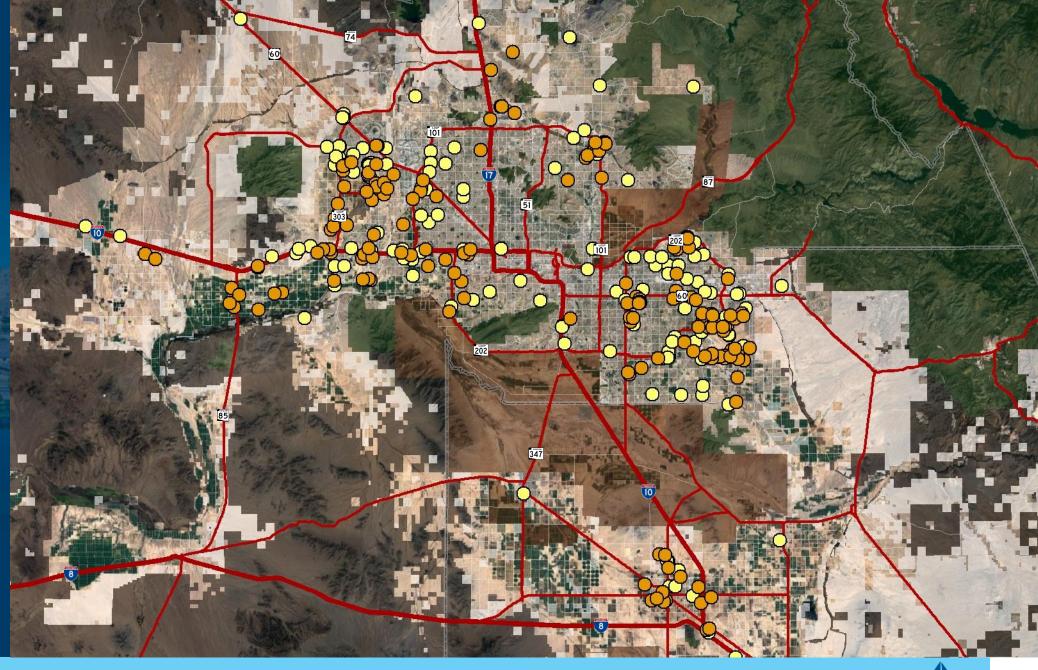
Averaged year over year monthly change for the last 12 months.

Industrial & Commercial Planning & Zoning Applications

2022 to 2023

- Industrial
- Commercial

Federal Indian Community State Trust Parks & Preserves



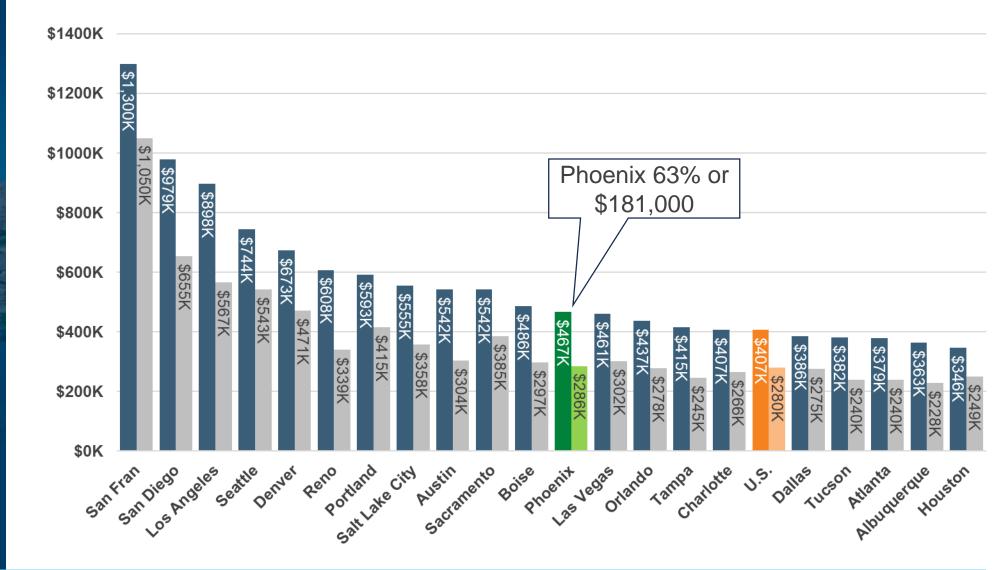
2019 to 2023 PHX MSA created Over \$250 Billion of Housing Equity

Translates to:

- Few to no Foreclosures
- Equity for Move Up Housing & Transfer of Wealth
- Attainability Became More Difficult

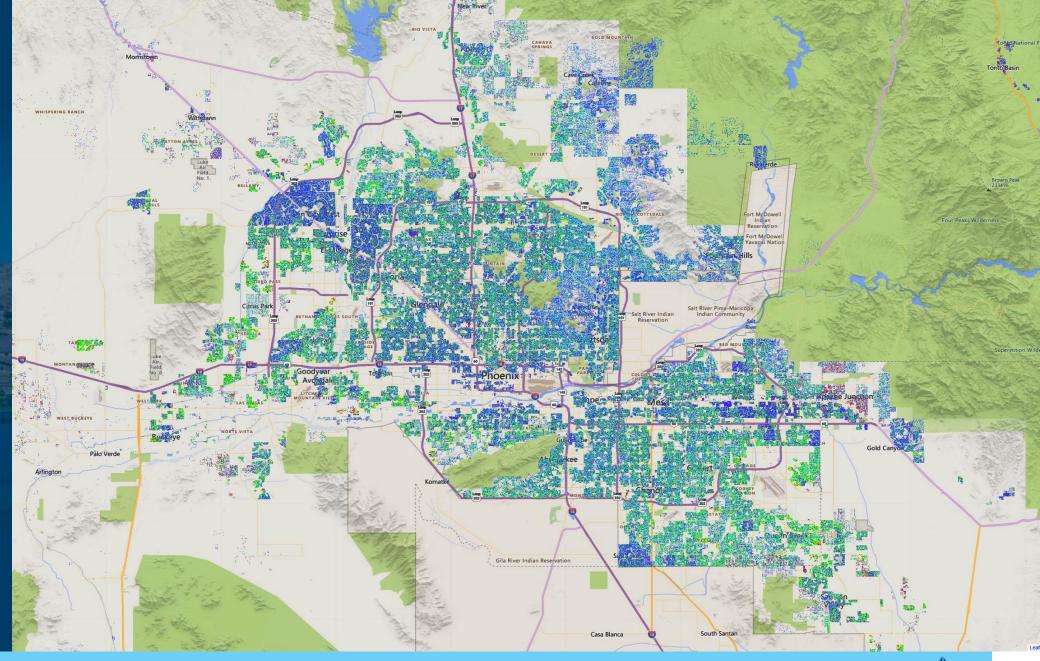
Median Resale Home Price

2023 3Q vs 2019 3Q



Homeowner Equity

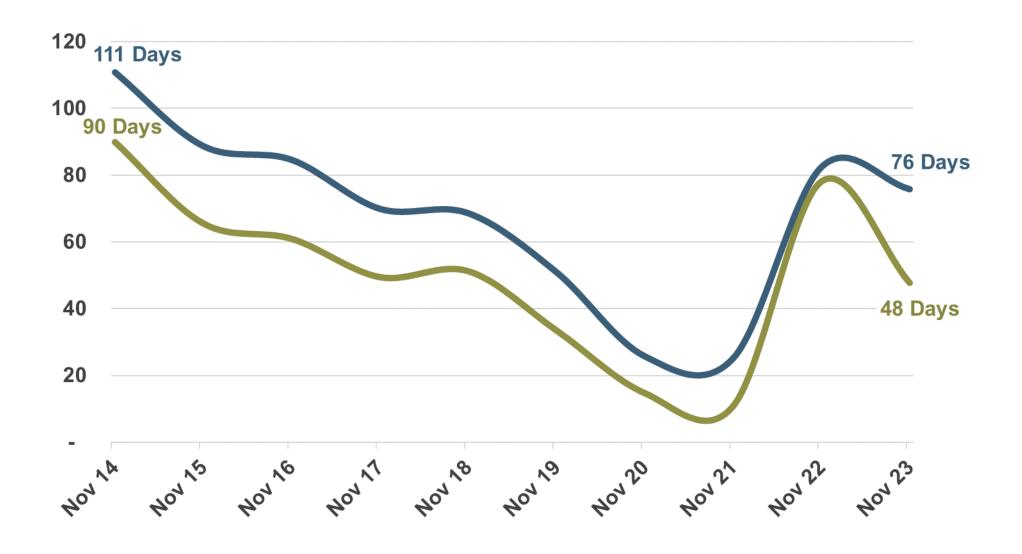
- Owned Outright
 - 80%+ Equity
 - 50% 80% Equity
 - 20% 50% Equity
- <20% Equity
- <20% Underwater</p>
- 20%+ Underwater



Source: PropertyRadar

LandAdvisors.com





New & Resale Median Resale Home Price – Metro Phoenix

New Homes

 Median Price
 \$485,490

 \$/SF
 \$229

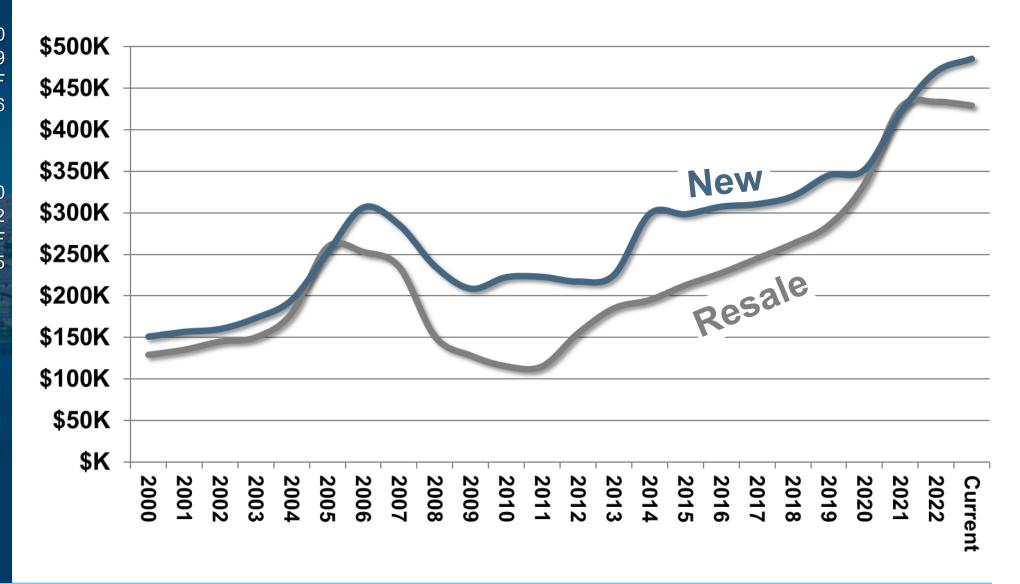
 Median Size
 2,119 SF

 12 Mo Volume
 23,026

Resale Homes

Median Price \$429,500 \$/SF \$252 Median Size 1,704 SF 12 Mo Volume 66,915

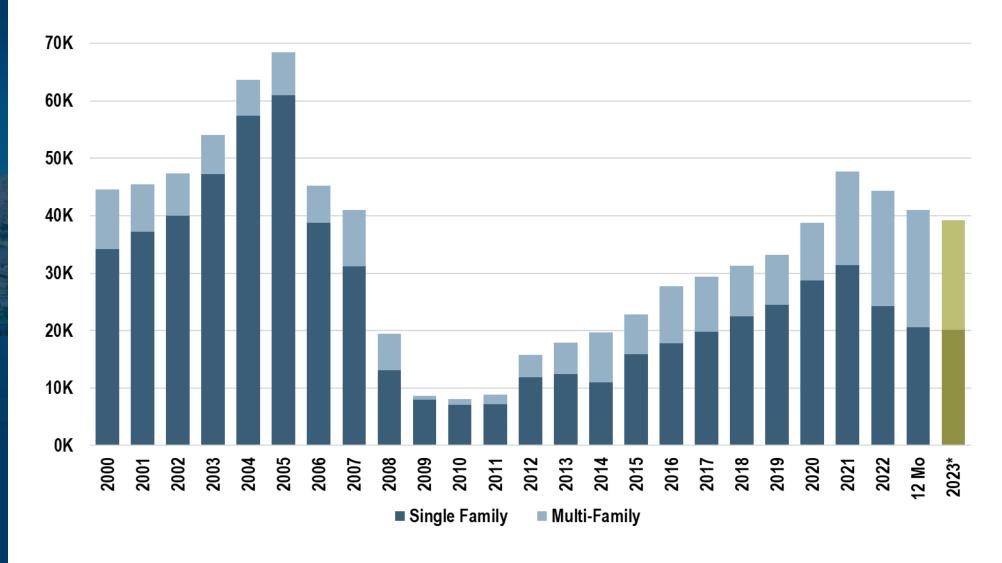
Apples to Apples:
2,119 sf Resale
Home vs New Home
Price Delta
8.1%



Source: RL Brown

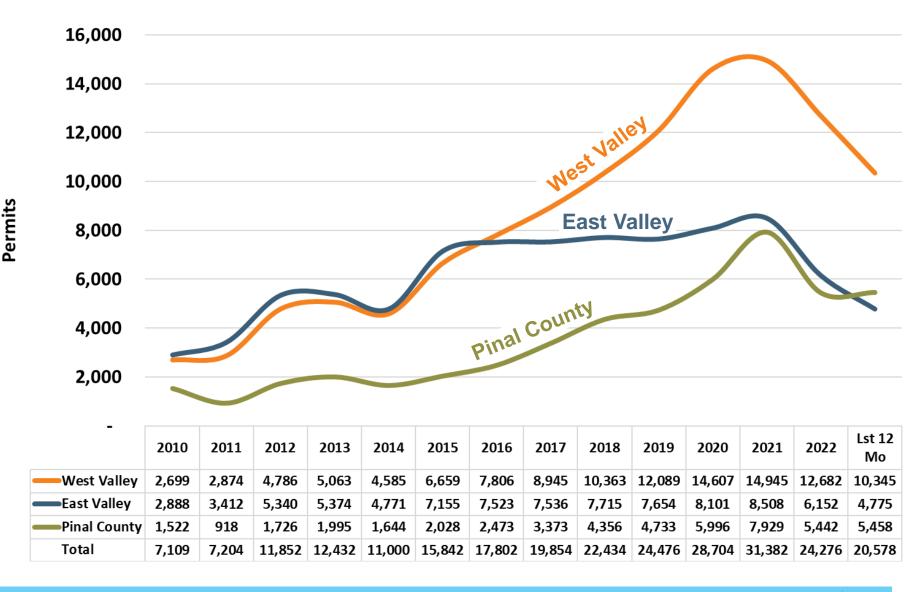
Single & Multifamily Permits – Metro Phoenix

	1990's				
SF	265,000	82%			
MF	59,000	18%			
Total	324,000				
	2000's				
SF	368,000	84%			
MF	70,000				
Total	438,000				
	SERVE SEL				
2010's					
SF	150,000	70%			
MF	65,000	30%			
Total	215,000				
2020 to Present					
SF	105,000	61%			
MF	67,000	39%			
Total	172,000				



2010 2023 Market Share Share **West Valley** 38% 50% **East Valley** 41% 23% Pinal 21% 27%

Single-Family Permits by Region – Metro Phoenix



Source: HBACA

Top 15 Homebuilders by Annual Permits – Metro Phoenix

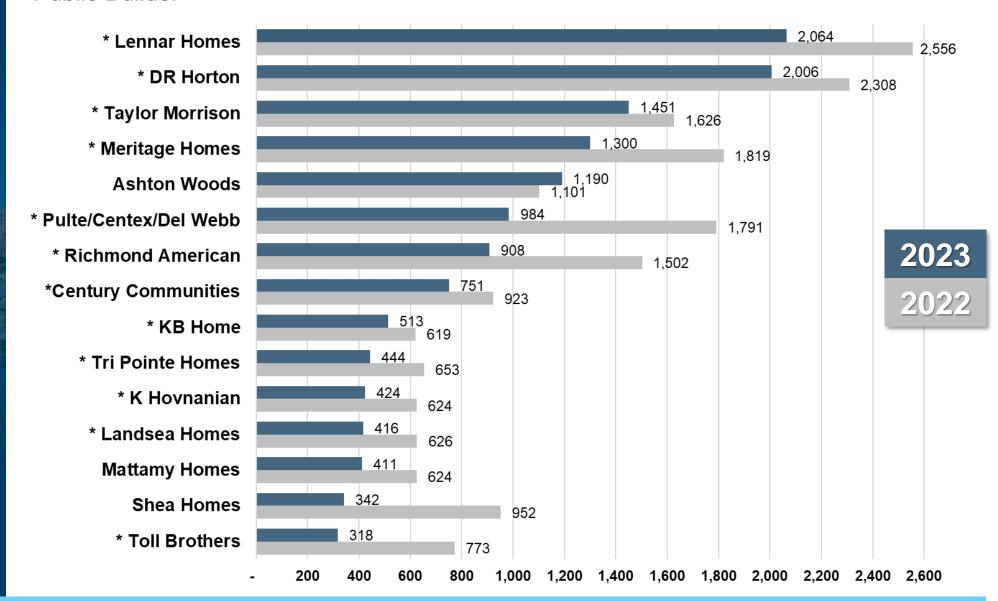
* Public Builder



2023 20,578

2022 26,844

Decrease -23%



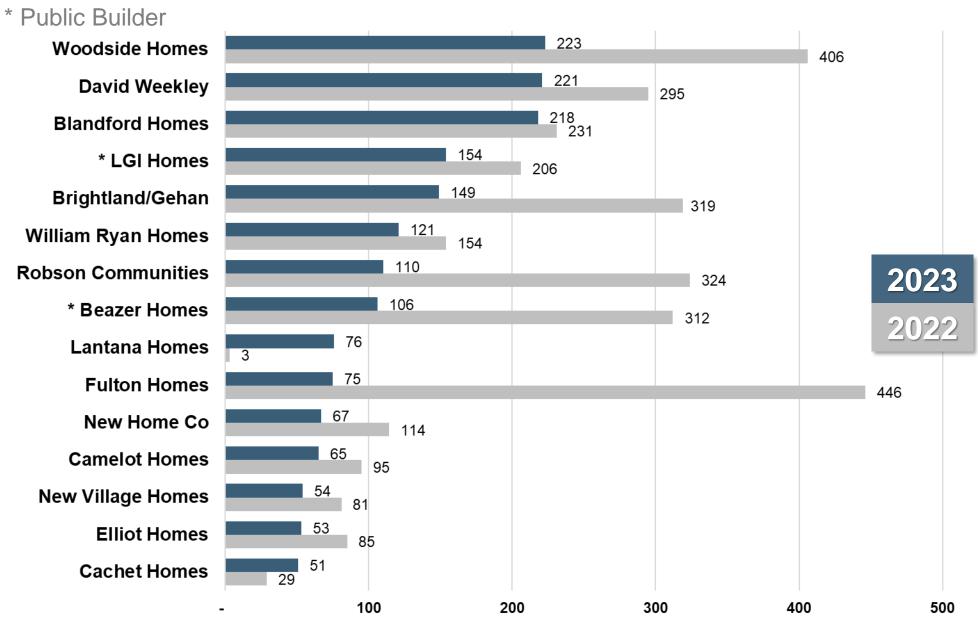
Next 15 Homebuilders by Annual Permits – Metro Phoenix



2023 20,578

2022 26,844

Decrease -23%



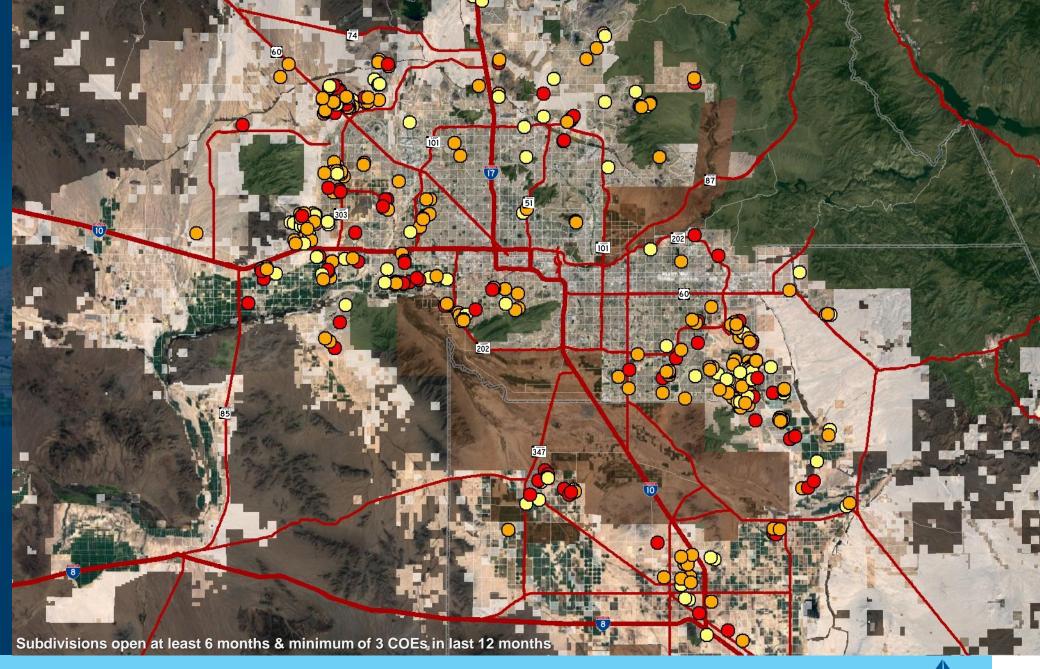
Closings Per Active Subdivision Last 12 Months

Closings

- 3 10 (96)
- 11 50 (215)
- Greater than 50 (88)

Active Subdivisions: 399

Federal Indian Community State Trust Parks & Preserves



Built Out Subdivisions Over Next 12 Months

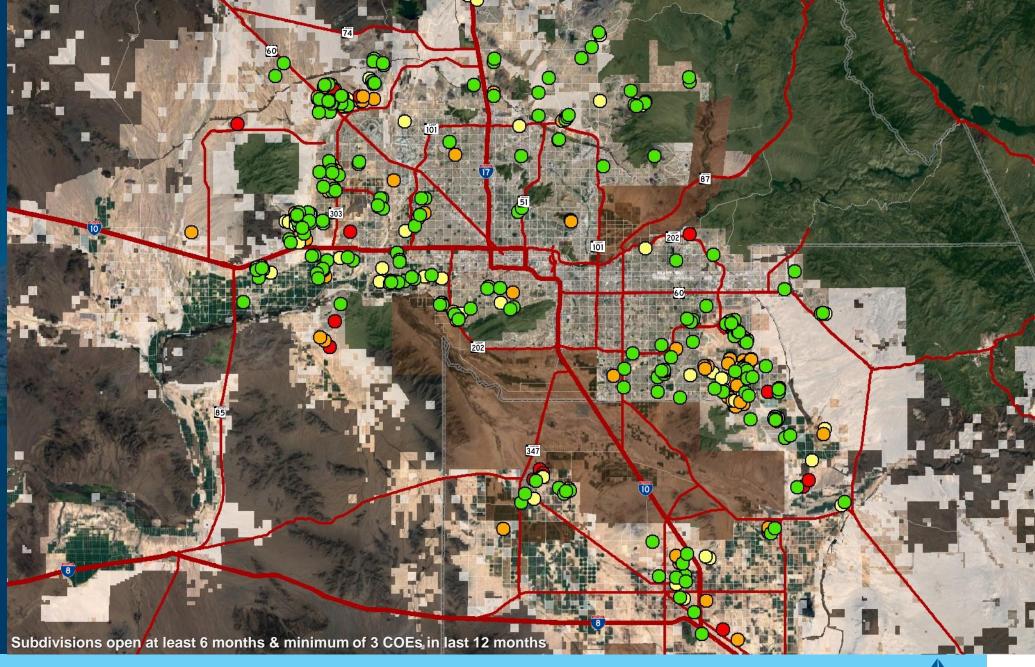
Closings

- 3 10 (96)
- **11 50 (215)**
- Greater than 50 (88)
- Built Out 12 Mo (203)

Active Subdivisions: 399

Built Out in 12 Months 203

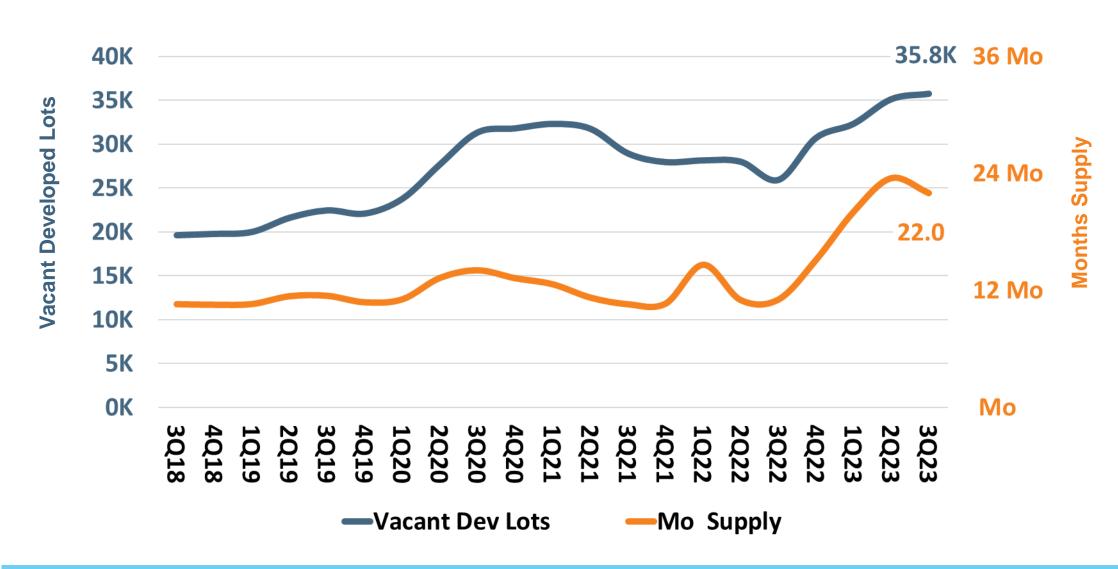
Federal
Indian Community
State Trust
Parks & Preserves



Finished Lot Inventory & Months Supply – Metro Phoenix



Conventional Finished Lots



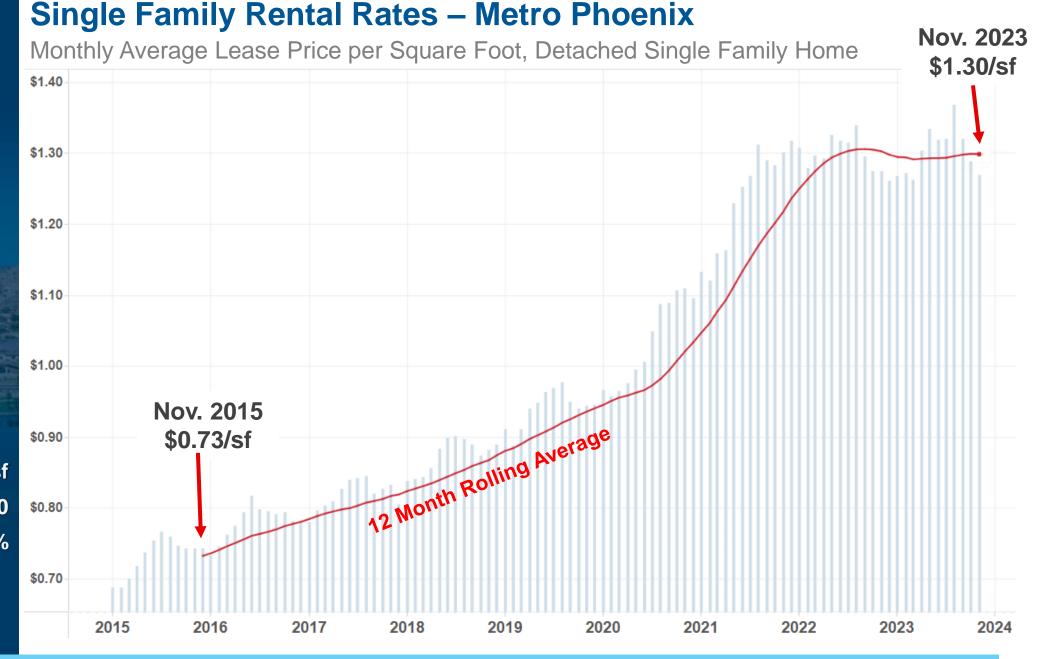
SF Rental Rates

74% Increase over the last 7 years

Phoenix Median Household Income

2015 \$55,700 2023 \$83,000 Increase 49%

Median Size 1,626 sf Median Rent \$2,100 Yield 4.4%



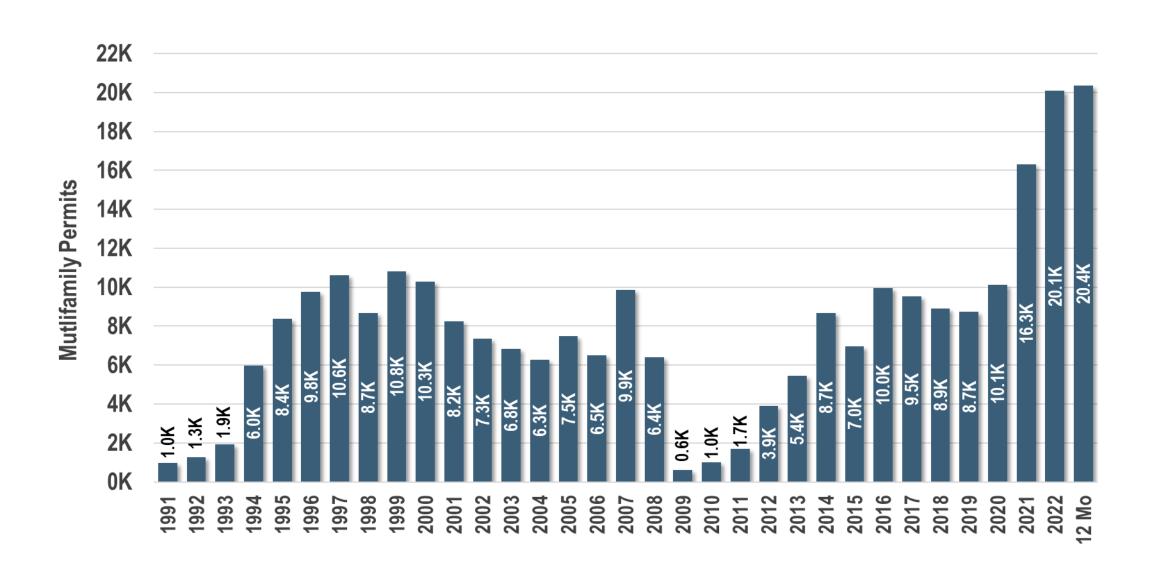
Multifamily Occupancy Rate & Rent Growth – Metro Phoenix

Reasons for Moving Out of an Apartment

- 1. Moving out state
- 2. Bought a home
- 3. On site transfer (moved from one unit to another)
- 4. Job Transfer
- 5. Moving In to/with Parents, Others







Apartments Construction by Submarket



Submarket	Properties	Units Under Construction
Southwest Phoenix	46	10,029
Northwest Phoenix	15	4,009
Tempe	9	3,923
Gilbert, Chandler, & Ahwatukee	13	3,244
Mesa	10	2,414
Downtown, Midtown, Uptown	17	5,386
North/Central Phoenix	4	1,248
North Phoenix & North Scottsdale	9	2,535
Camelback & South Scottsdale	4	1,360
Queen Creek & Apache Junction	6	1,418

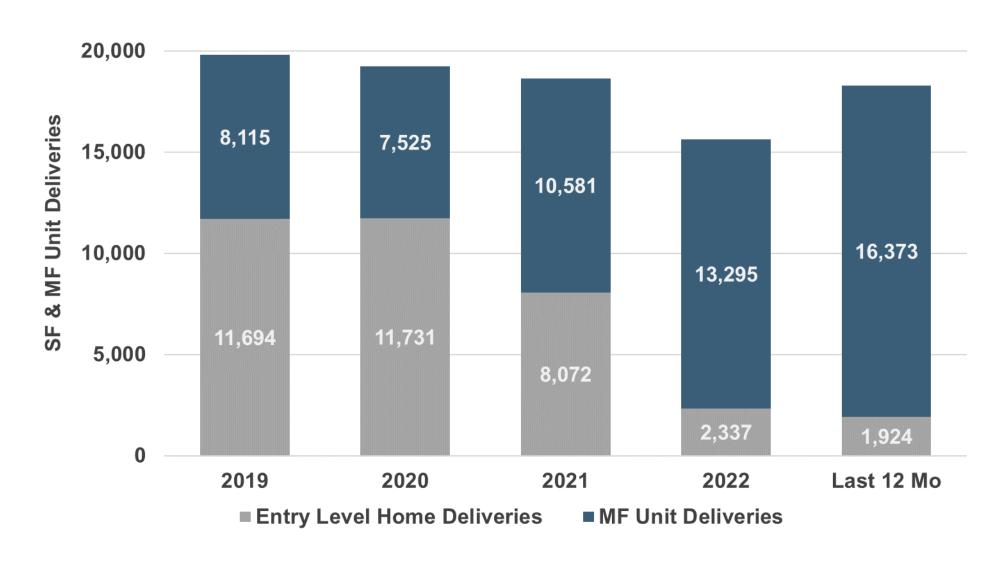
Phases of the Real Estate Cycle

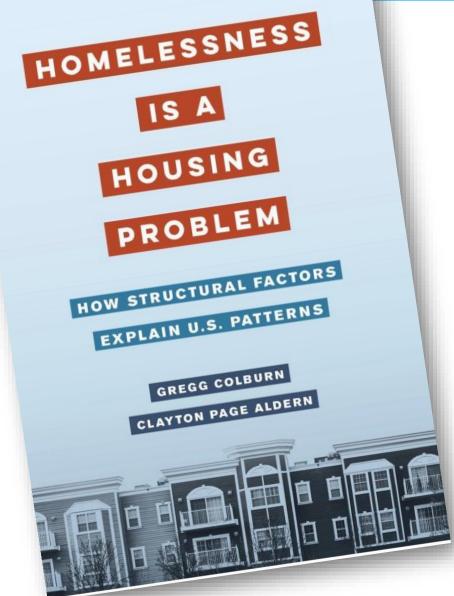


New Multifamily Units vs. Entry Level Homes – Metro Phoenix



Entry Level New Homes Priced Under \$350,000





There is general belief that the prevalence of homelessness in a given city is due to mental illness, drug use, poverty, weather, generosity of public assistance, and low-income mobility—

And they found that none explain the regional variation observed across the country.

Instead, housing market conditions, such as the cost and availability of rental housing, offer a far more convincing account.

2023 PIT Count Total

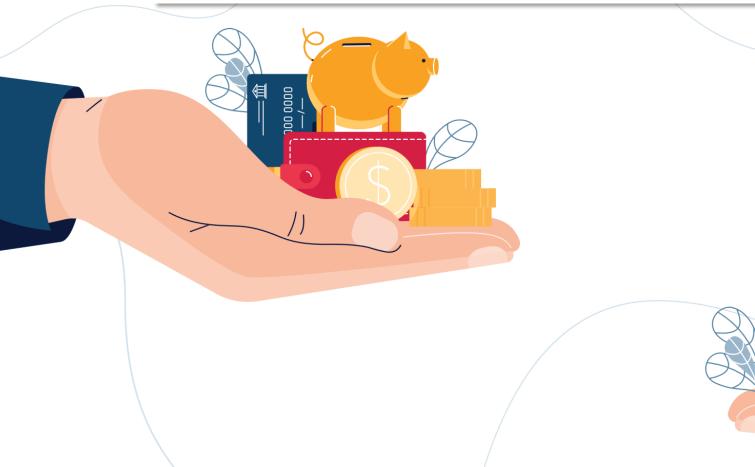
9,642

people experiencing homelessness in Maricopa County on the night of January 23, 2023

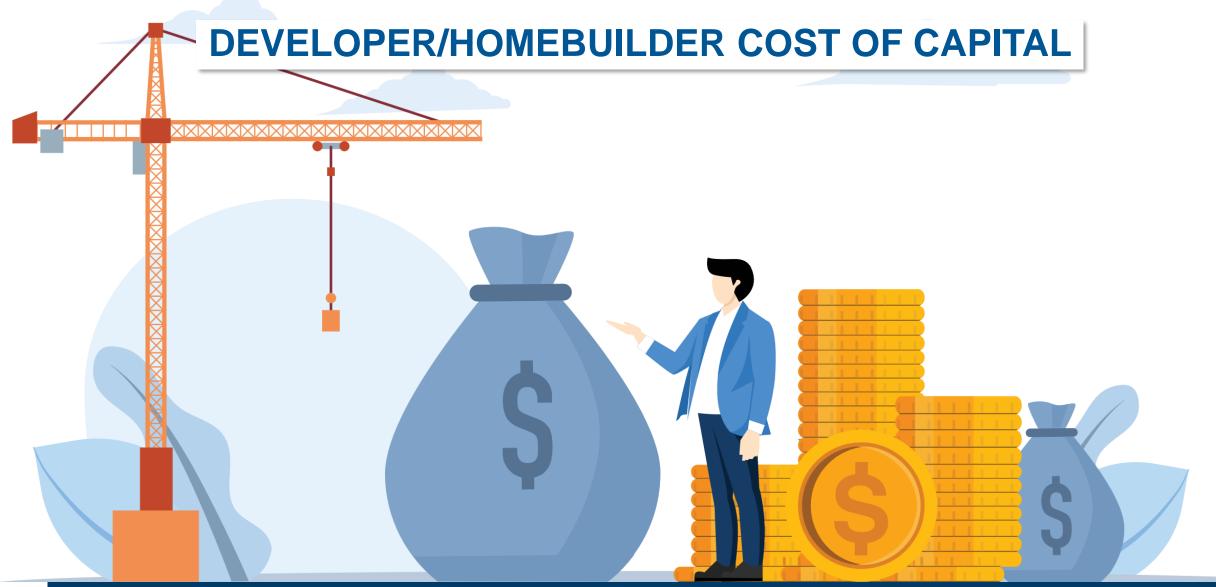




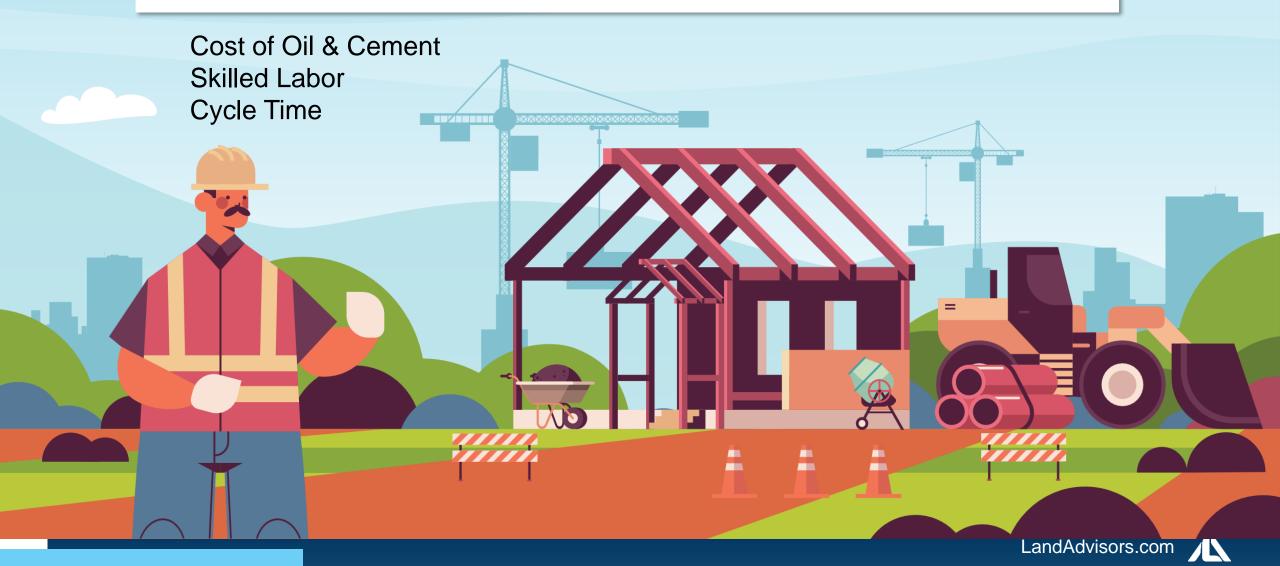
INCREASED HOUSE PRICE COMPOUNDED WITH HIGH INTEREST RATES







COST TO COMPLETE HORIZONTAL IMPROVEMENTS



DIRECT COSTS – ABOVE THE CURB



DESIGN GUIDELINES & INFRASTRUCTURE REQUIREMENTS





LOCAL GOVERNMENT IMPACT FEES & PROCESSING TIME



SKILLED LABOR AVAILABILITY - CYCLE TIMES

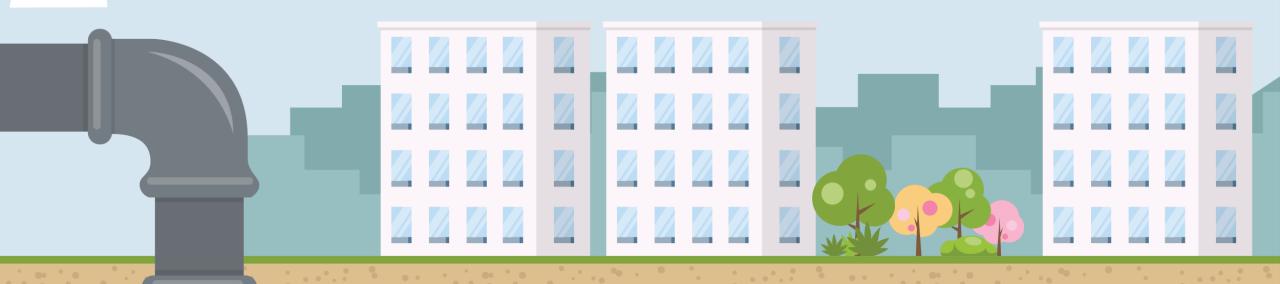




WET & PAPER WATER - TREATMENT - DELIVERY



MAJOR INFRASTRUCTURE - WASTEWATER TREATMENT - WATER TREATMENT - POWER



AMOUNT OF SHOVEL READY LAND AVAILABLE AND THE FINANCIAL FEASIBILITY TO SERVICE ADDITIONAL LAND

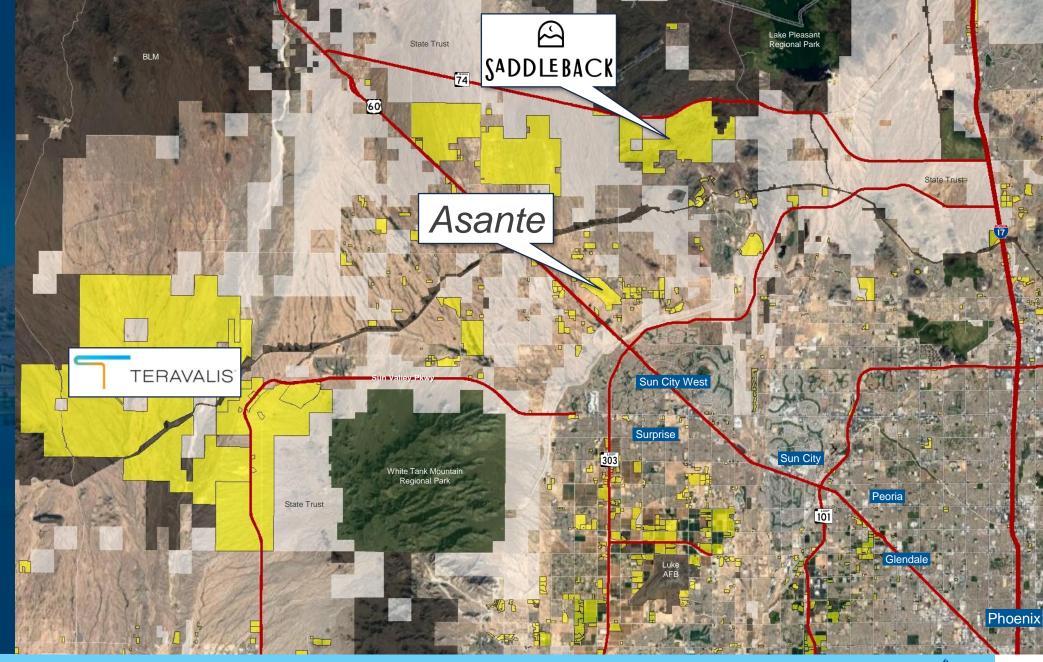


FINISHED LOT AND RESIDUAL LAND PRICE

"THE PRICE OF LAND IS THE RESIDUAL OF ALL COSTS & REASONABLE PROFIT"

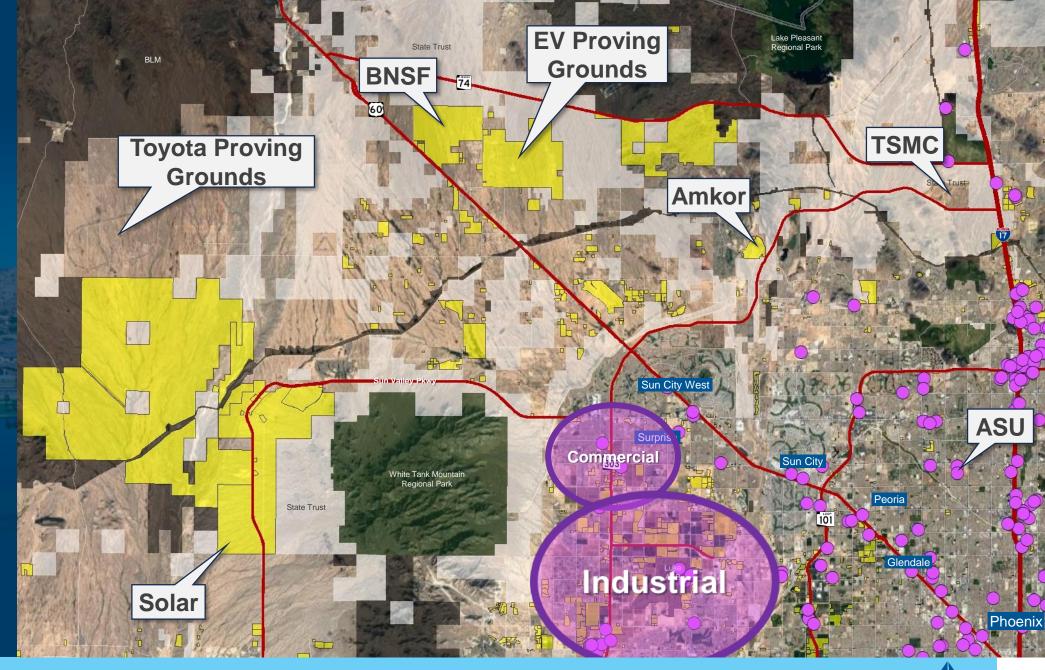


Recent Sales 2021 to 2023



Recent Sales 2021 to 2023

250+ Employees



Taiwan Semiconductor Manufacturing Company





Amkor

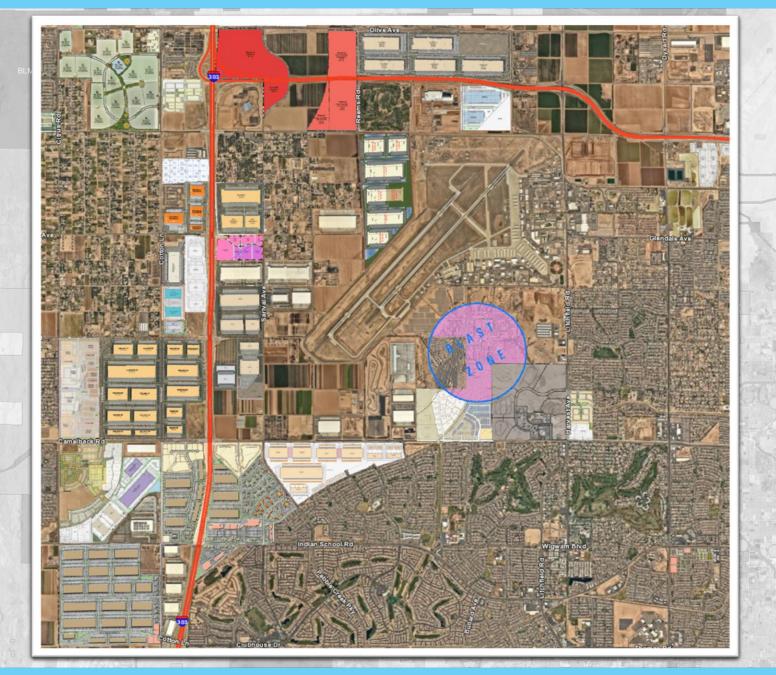






303 Corridor





12 Month SF Permits 3,562

Projects

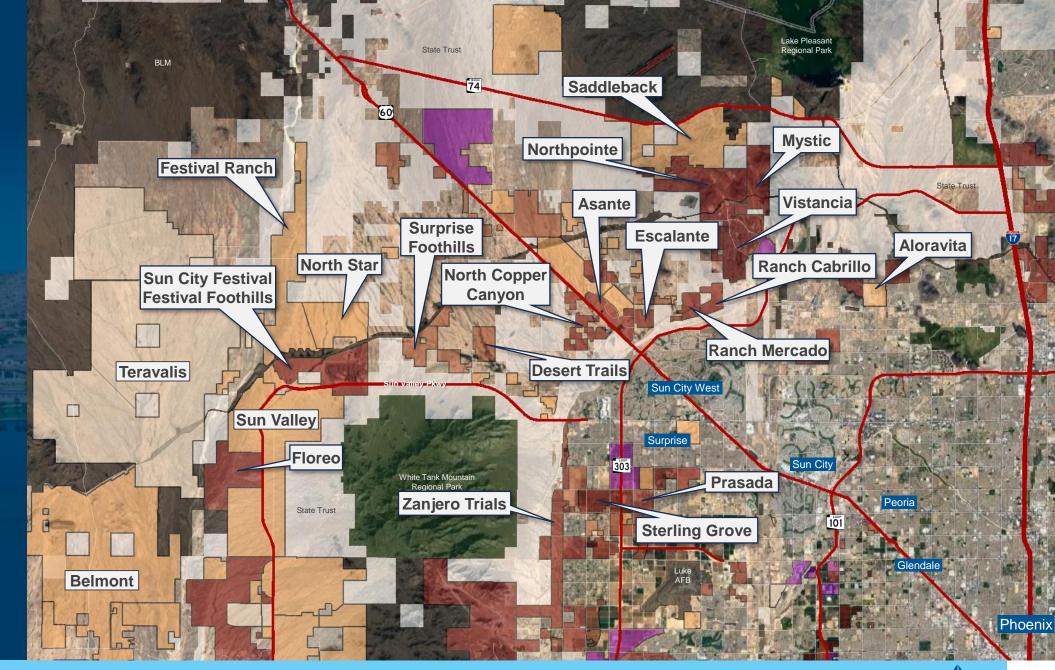
Active Pending Conceptual

Future

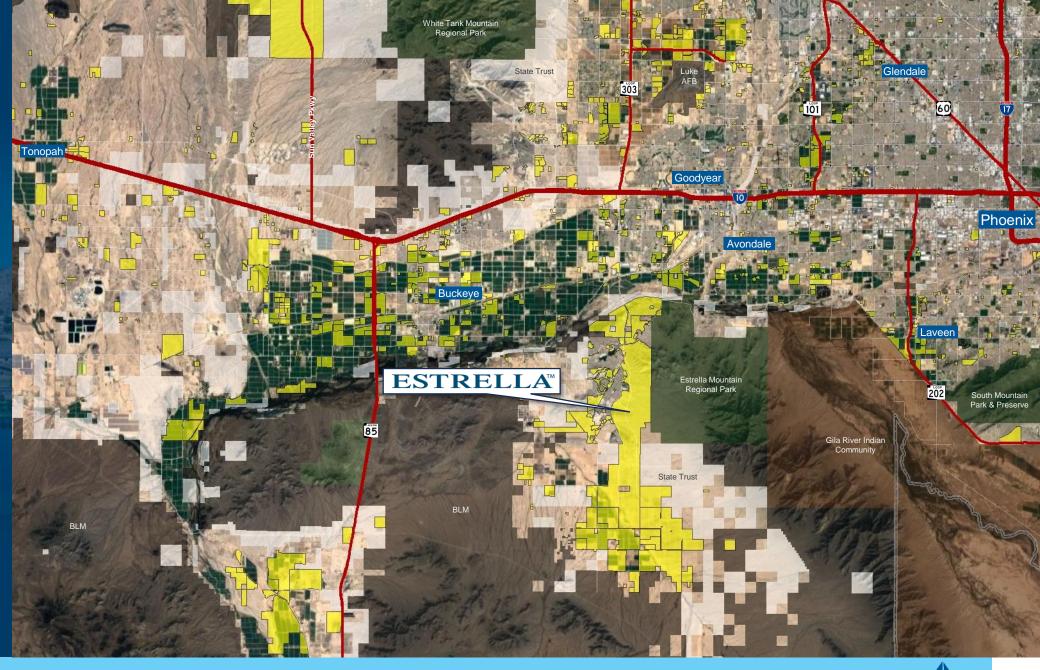
Non-Residential

Federal
Indian Community
State Trust

Parks & Preserves

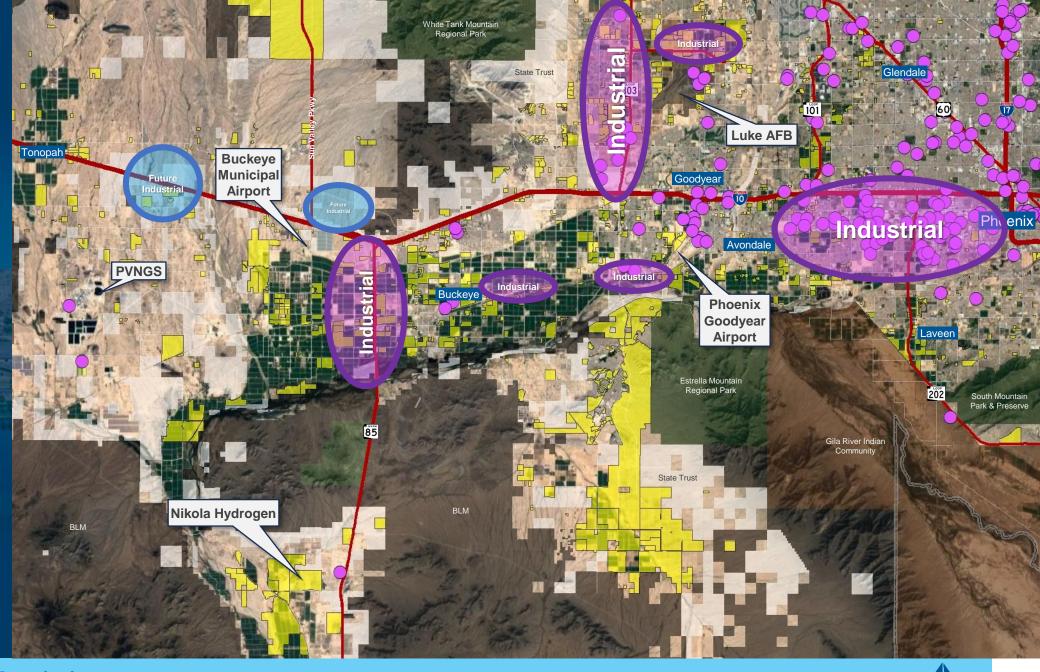


Recent Sales 2021 to 2023



Recent Sales 2021 to 2023

250+ Employees



Goodyear Employment





Goodyear Employment



Manufacturing and Industrial

- 1. Andersen Windows & Doors
- 2. AZZ Galvanizing
- 3. Ball Corporation
- 4. Cavco Industries
- 5. CornellCookson
- 6. Factor a subsidiary of Hello Fresh
- 7. fairlife by The Coca-Cola Company
- 8. Global Organics
- 9. Gorbel
- 10. Helix Electric
- 11. Huhtamaki
- 12. IAC Industries
- 13. KPS Global
- 14. Meyer Burger
- 15. MLily/Healthccare Arizona
- 16. Utz Quality Foods/Poore Brothers
- 17. Schoeller Allibert
- 18. Snyder's of Hanover
- 19. Sub-Zero, Wolf, and Cove
- 20. Wildeck

Data Centers

- 1. Compass Datacenters
- 2. Microsoft
- 3. Stream Data Centers
- 4. Vantage Data Centers



Aerospace and Aviation

- AerSale
- 2. Lufthansa Aviation Training
- 3. Galaxy International
- 4. LuxAir Jet Centers
- 5. Prime Solutions Group
- 6. Sonoran Technology
- 7. Spartech
- 8. United Aviate Academy
- 9. Unmanned Vehicle University



Logistics

- 1. Amazon, Fulfillment & Delivery Station
- 2. Best Buy Logistics
- 3. Chewy.com
- 4. Daimler Trucks North America
- Dick's Sporting Goods
- 6. FedEx
- 7. Ferrero USA
- 3. KeHE
- 9. Macy's Bloomingdale's
- 10. McLane Sunwest
- 11. Michael Lewis Company
- 12. REI
- 13. UPS
- 14. XPO Logistics, serving Boeing
- 15. Quetico

Buckeye Employment





12 Month Permits 6,559

Projects

Active

Pending Conceptual

Future

Non-Residential

Federal

Indian Community

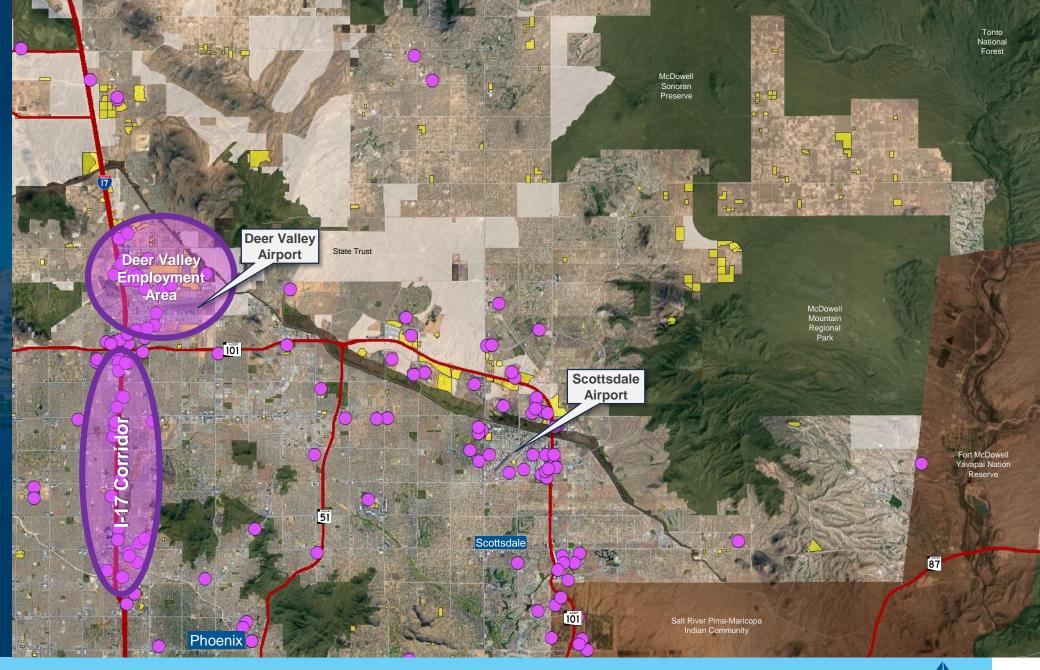
State Trust

Parks & Preserves

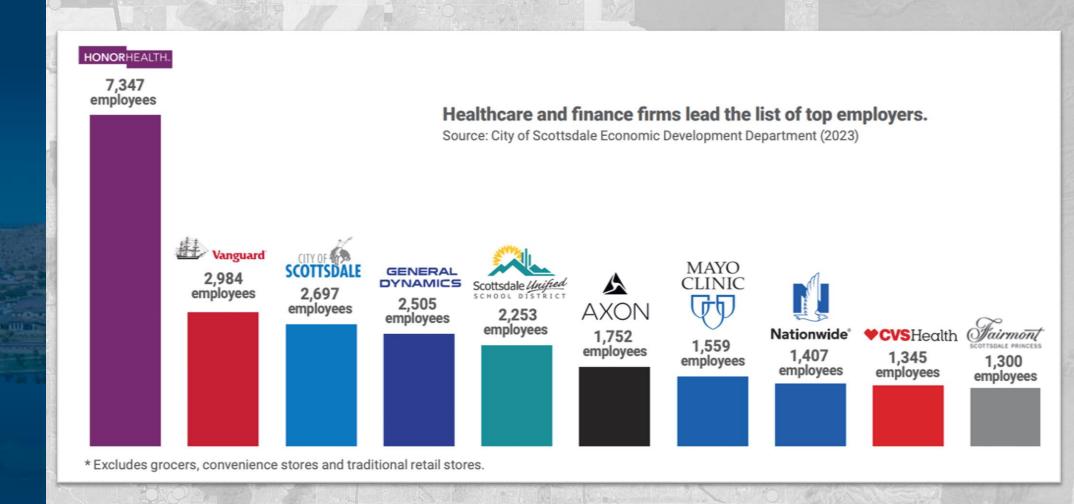


Recent Sales 2021 to 2023

250+ Employees



Scottsdale Employment







12 Month SF Permits 1,879

Projects

Active Pending Conceptual

Future

Non-Residential

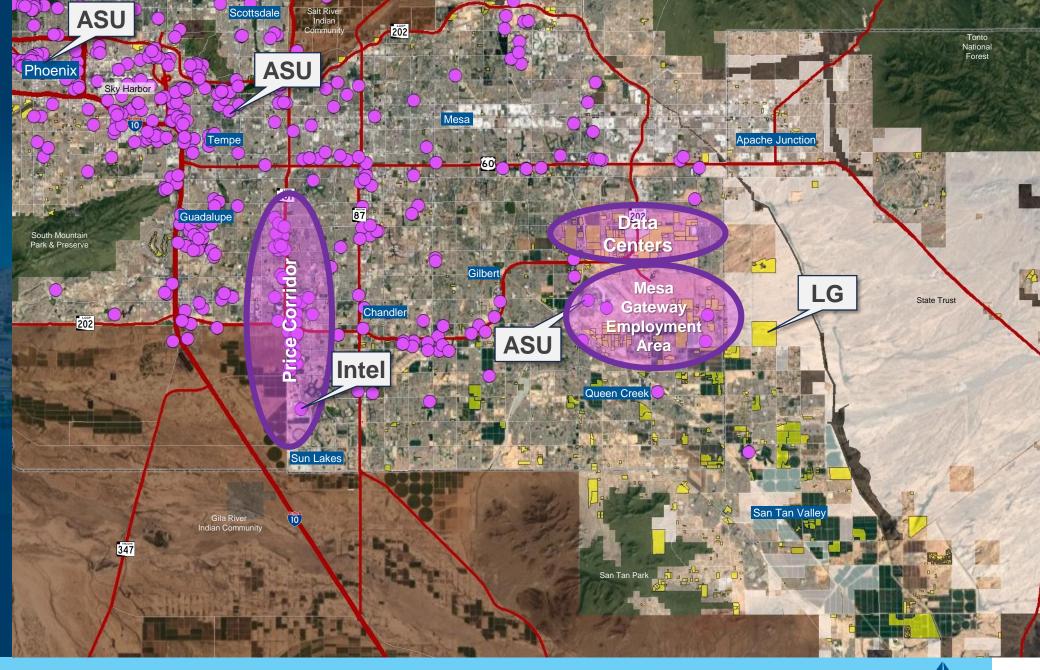
Federal
Indian Community
State Trust

Parks & Preserves



Recent Sales 2021 to 2023

250+ Employees



Intel

\$20 billion expansion under construction





12 Month SF Permits 5,008

Projects

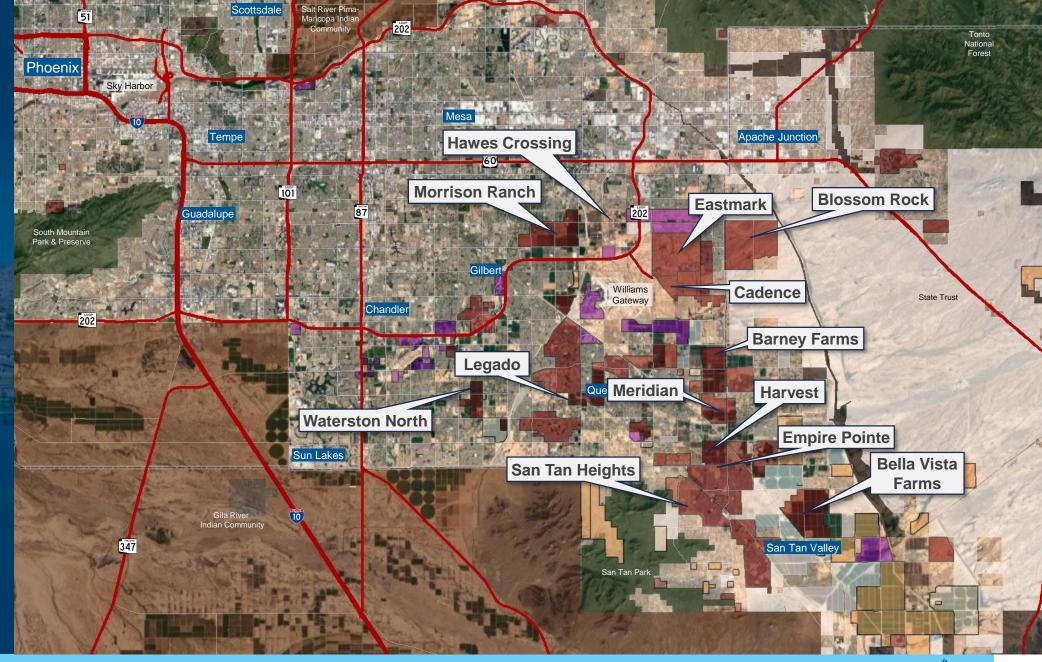
Active
Pending
Conceptual

Future

Non-Residential

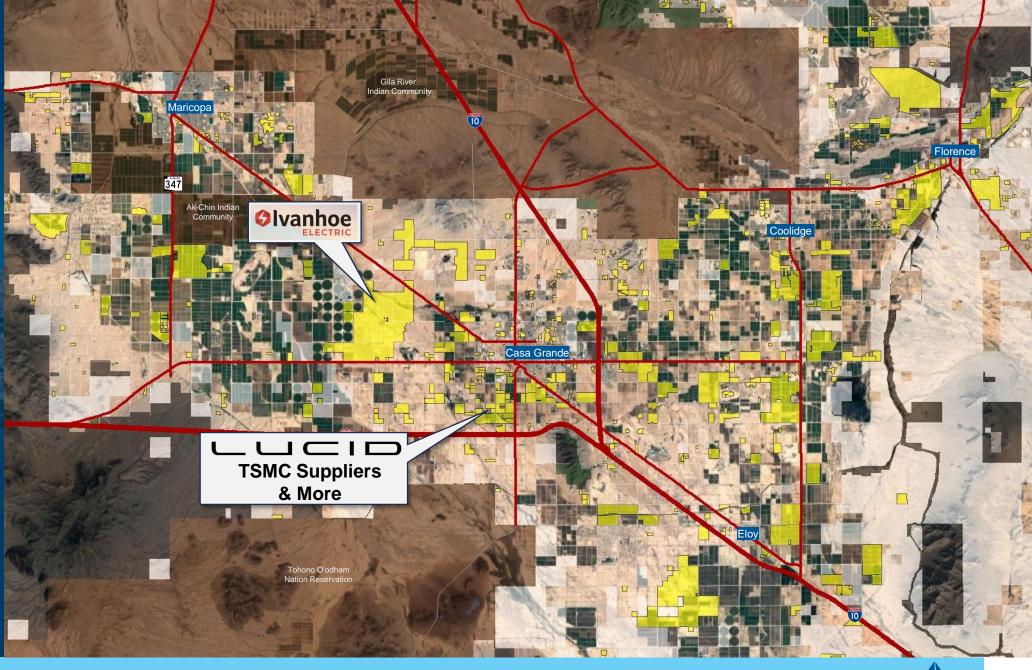
Federal
Indian Community
State Trust

Parks & Preserves



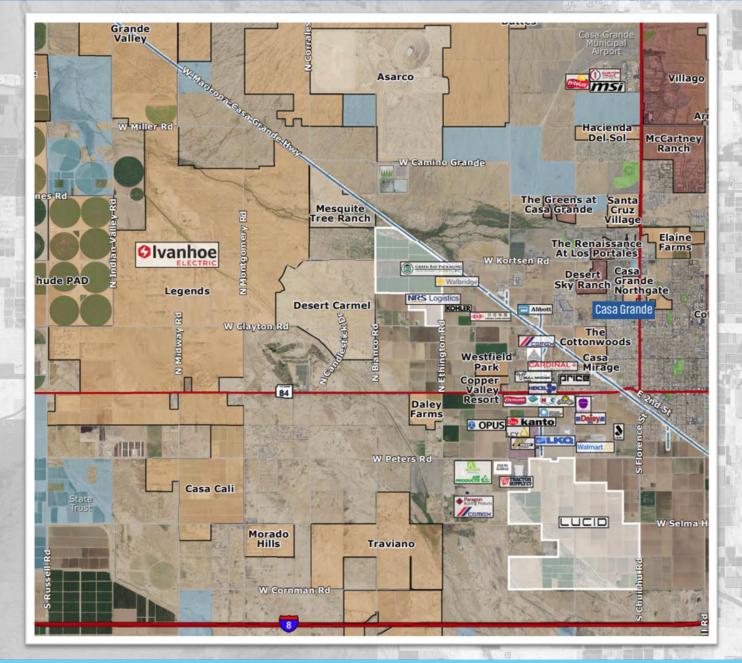
Pinal County

Recent Sales 2021 to 2023



Pinal County

Casa Grande Employment



Pinal County

12 Month SF Permits 2,727

Projects

Active

Pending Conceptual

Future

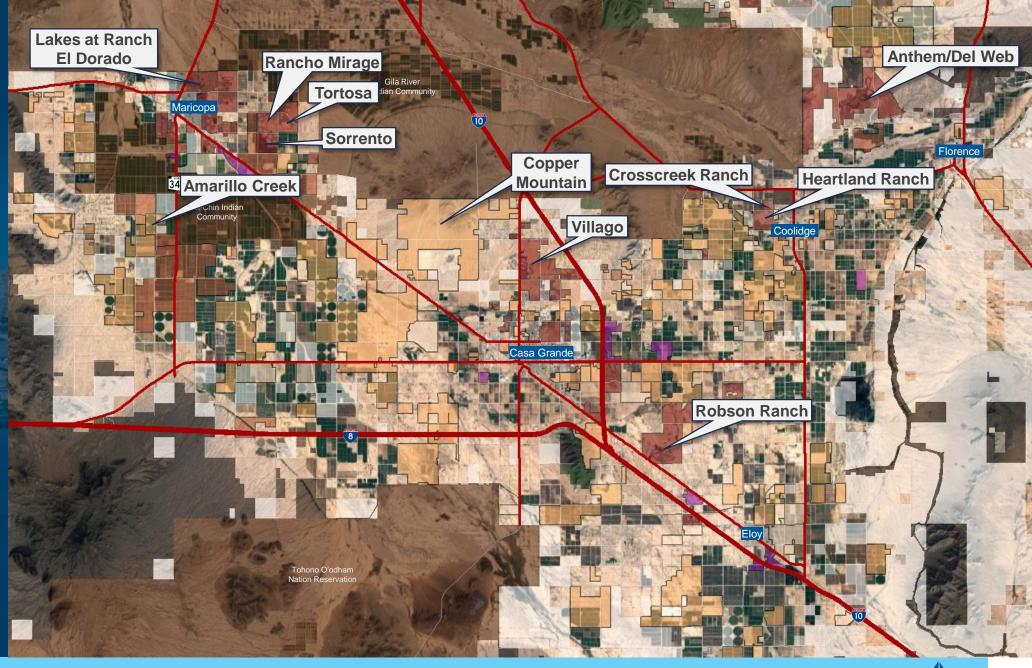
Non-Residential

Federal

Indian Community

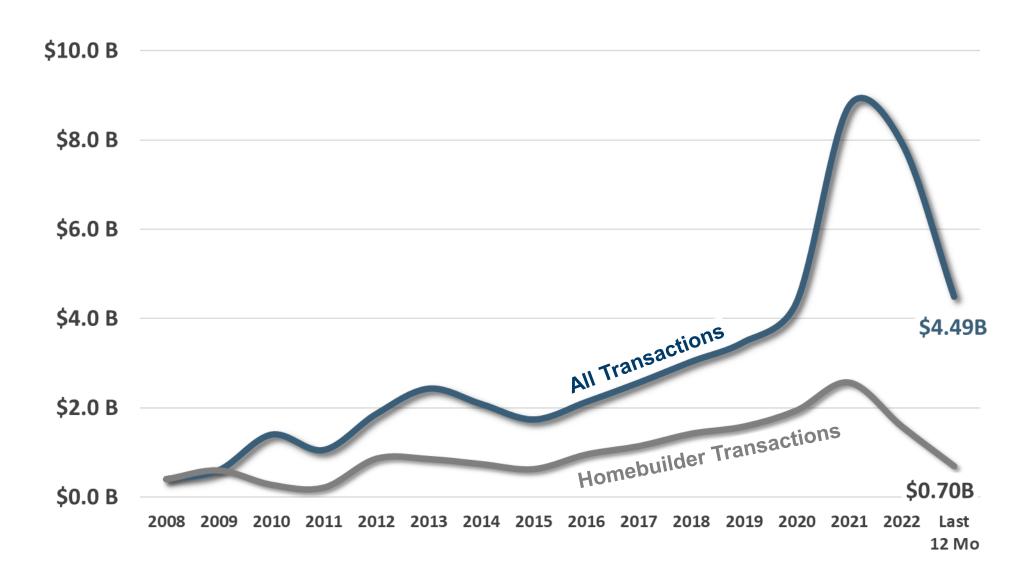
State Trust

Parks & Preserves



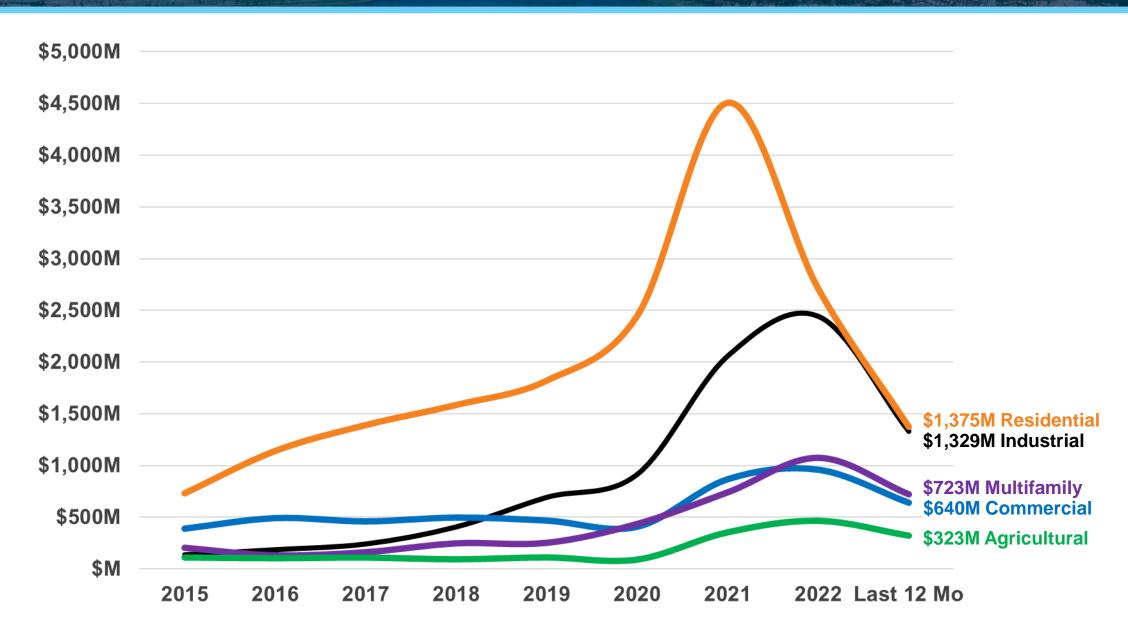
Land Transactions Annual Volume – Metro Phoenix





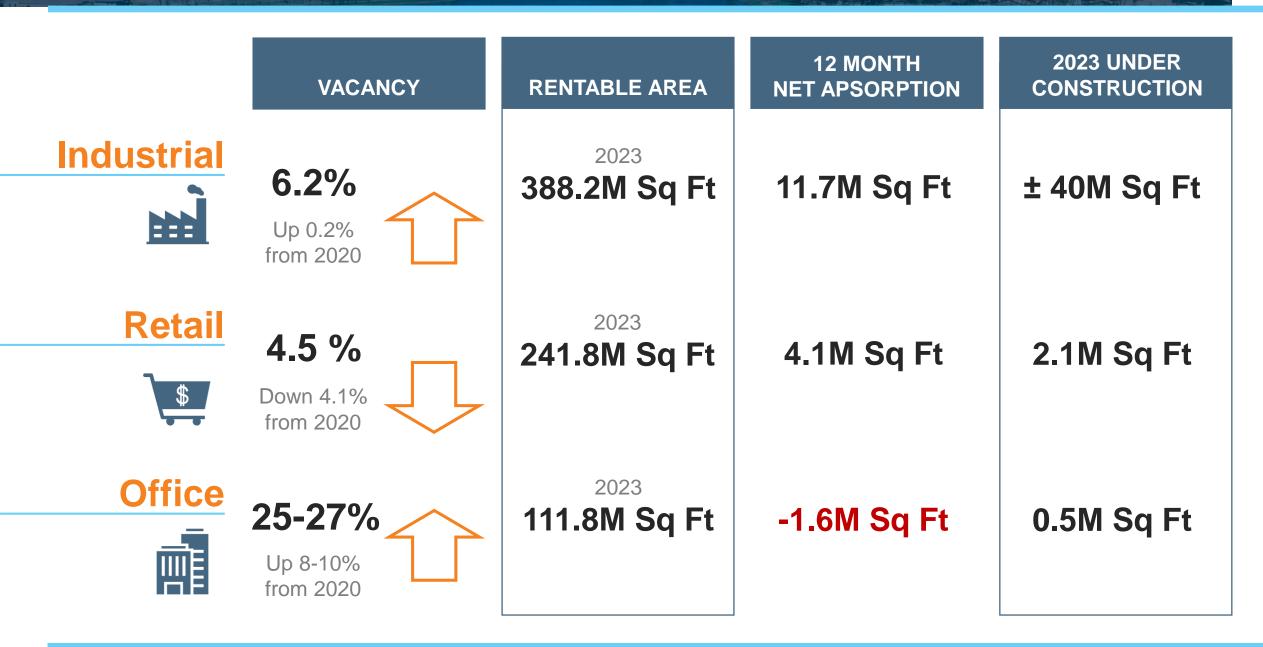
Sales Volume by Land Type – Metro Phoenix





Commercial Real Estate – Metro Phoenix



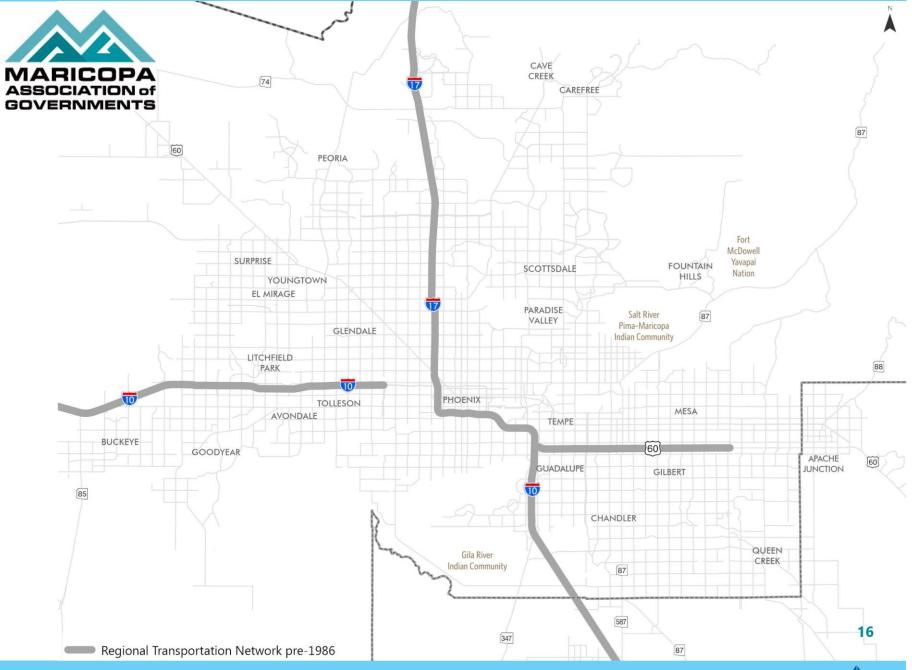


State of the Office Market

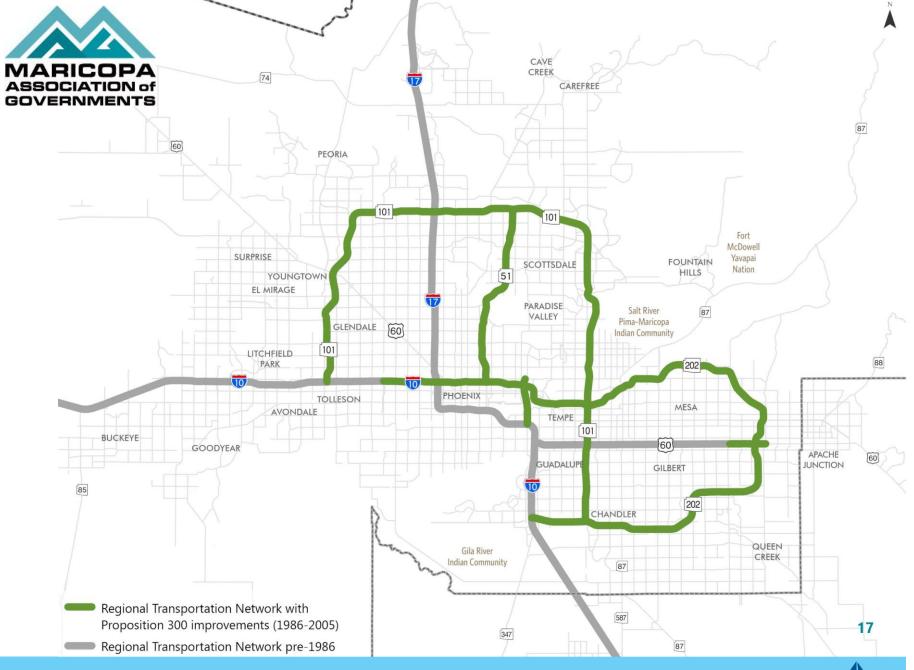
- Lease rates are still holding because tenant improvement costs are \$110/sf vs 4 years ago at \$65/sf.
- 20-year average of 1.6 million sf annual absorption. Current -1.6M
- Sublease space is 3X normal at 7 million sf available and growing.
- There is only 400,000 SF of new office product under construction. Normal is 2 million sf of new construction.
- Abundance of functionally obsolete office Re-Use Strategies underway.
- Tenants desire a "really cool" space to attract and retain employees.
- Camelback Corridor and all 3 Scottsdale submarkets are where the most leasing activity is happening.

Regional Transportation Network: Pre-1986

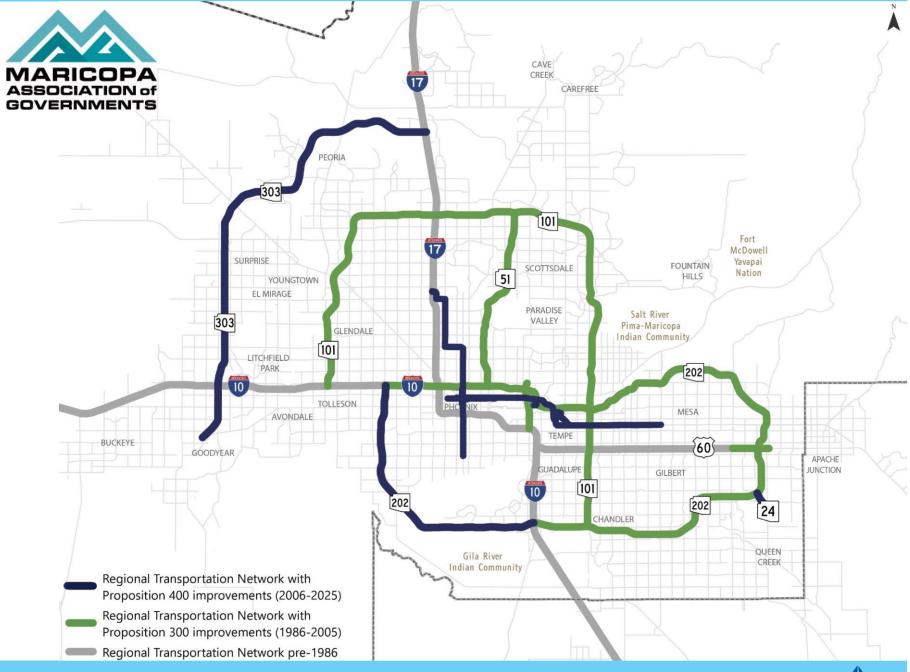




Regional Transportation Network: Proposition 300 (1986 - 2005)



Regional Transportation Network: Proposition 400 (2006 - 2025)



Planned Investment Overview

Prop 479

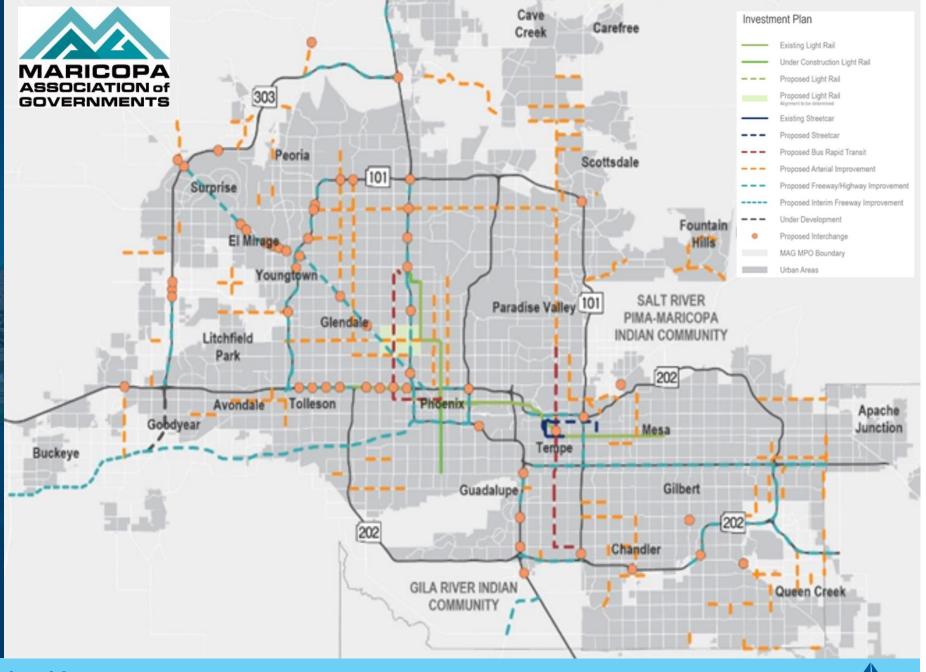
Extends ½ cent transportation tax to 2045

Allocations

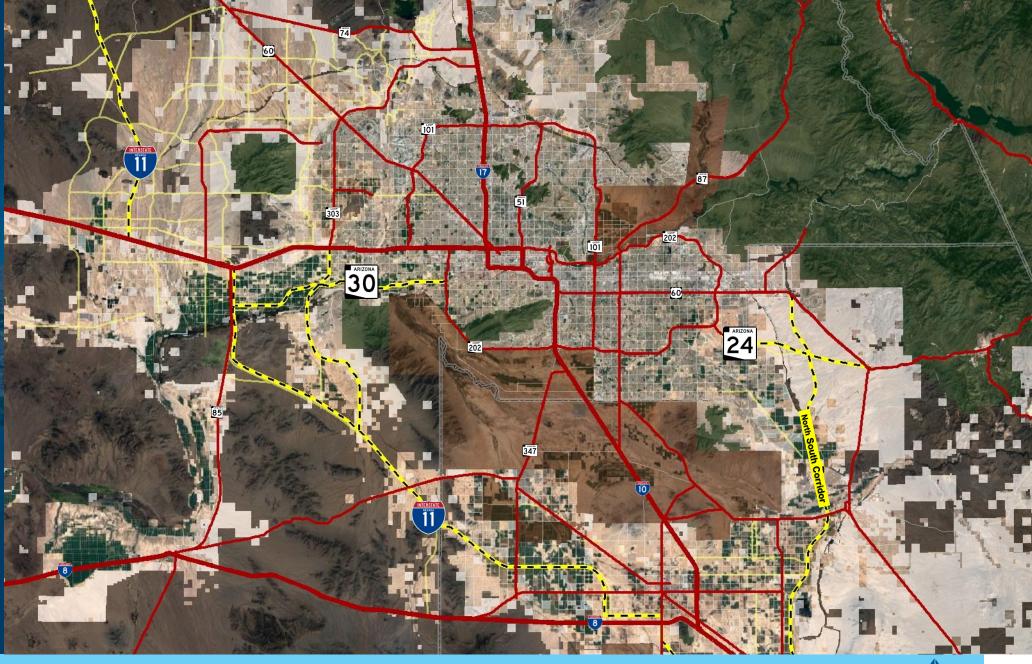
Highways 40.5%

Roads 22.5%

Public Transit 37.0%



Planned Freeways



Mater Mater

Phoenix Active Management Area Study



AWS Modeling

ADWR staff have received critiques/concerns regarding the validity of the model. Many of the critiques are directed at programmatic requirements and assumptions that are tied to statute, rule, and policy, including:

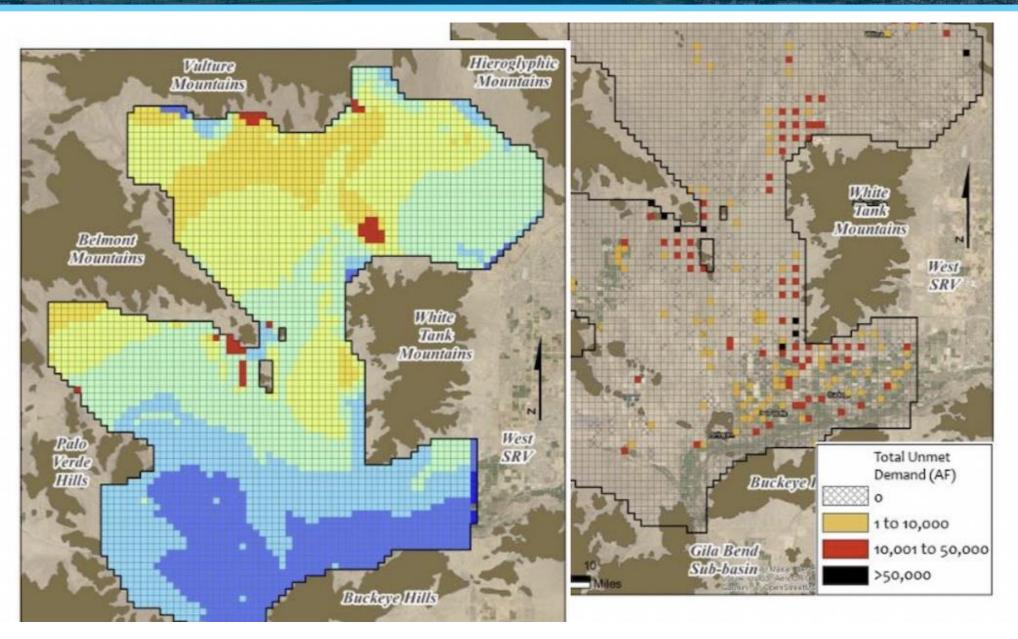
- Assumptions regarding the use of effluent to replace groundwater pumping
- Ramping up of demands over time
- Assumptions regarding Colorado River shortages

These and other policy concerns can be discussed.

Concerns and proposals that are technical in nature, such as pumping relocation, can be addressed by ADWR staff outside of the Council and committee process. Please contact AWS Manager David McKay.

AWS Modeling – "Well Placement & Demand Calculator" A Land Advisors or Canal Advisor o

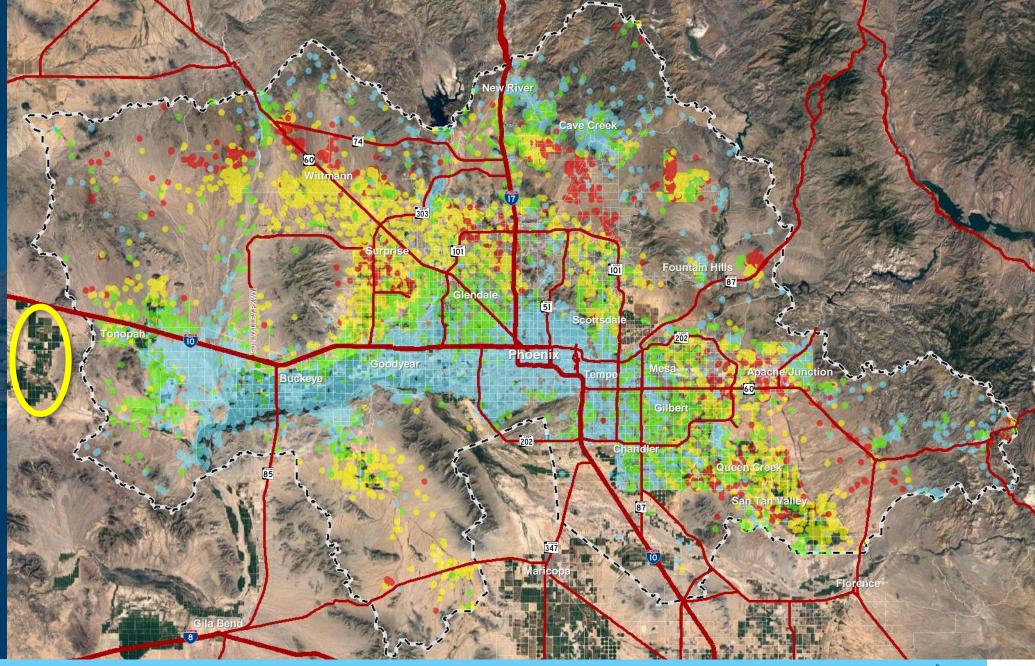




Phoenix AMA Well Water Levels

Water Depth at Well Site

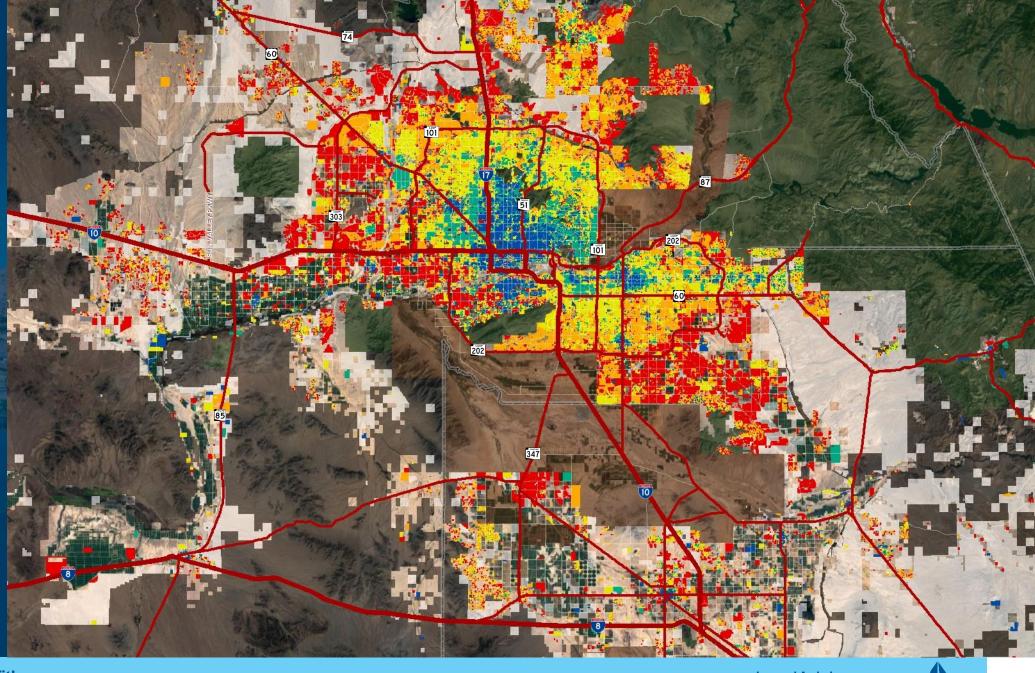
- **10 150 ft**
- 150 300 ft
- 300 500 ft
- Greater than 500 ft
- **AMA** Boundary



Metro Phoenix Developed Land

Year Built Pop
Before 1955 500K
1956 – 1970 1.04M
1971 – 1985 1.92M
1986 – 2000 3.25M

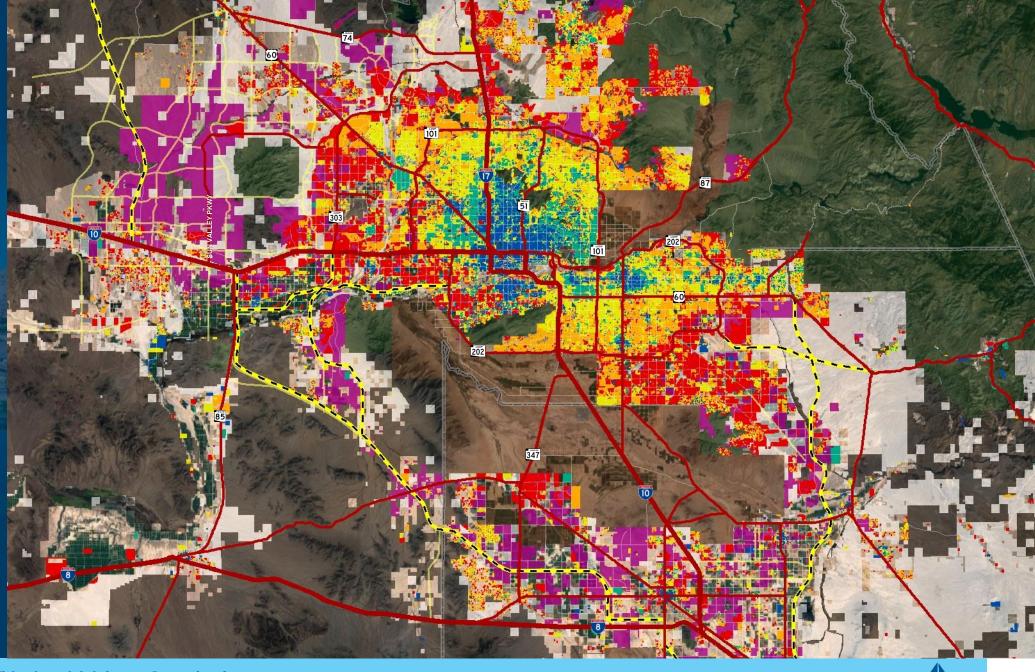
1986 – 2000 3.25M 2000 – 2023 5.00M



Metro Phoenix Developed Land & Future Growth

Year Built Pop
Before 1955 500K
1956 - 1970 1.04M
1971 - 1985 1.92M
1986 - 2000 3.25M
2000 - 2023 5.00M

2024 +





Headwinds

- Continued Irritation from Rising Costs & Interest Rates
- Processing Times from Initial Application to Building Permit
- Wages have not kept up with increased rents and house prices – Low Affordability Ratios
- Proving and Providing Water Legal, Political & Feasible
- Behind on Large Infrastructure Sewer/Water/Power
- The Constant Political Dysfunction



Tailwinds

- Sustainable Long-Term Growth "Rather Be in AZ"
 - Population
 - Employment
- Housing
 - Supply Remains Mostly Short
 - Relative Attainability and Affordability (vs CA, WA, OR, CO)
- Government
 - Low Regulation Relatively
 - Cooperative & Pro Growth
 - Rationalizing & Support of Higher Density
- Wealth
 - Increasing Wages
 - Transfer of Wealth Boomers to Gen-X/Millennials
 - Stock Market Wealth Effect
 - Housing Wealth Effect

Conclusions

- Metro Phoenix will Continue to be Top Ranked in Housing Activity, Population and Employment Growth
- Residential Affordability will Continue to be Challenged
 - Lower Interest Rates & Apartment Supply Will Help
- Income Property Financial Disruption will run through 2025 - Challenging Owners, Developers and Lenders
- Phoenix Metro will Remain the Land of Opportunity

2023 PHOENIX LAND AND HOUSING FORECAST

